

AMERICAN GAS ASSOCIATION

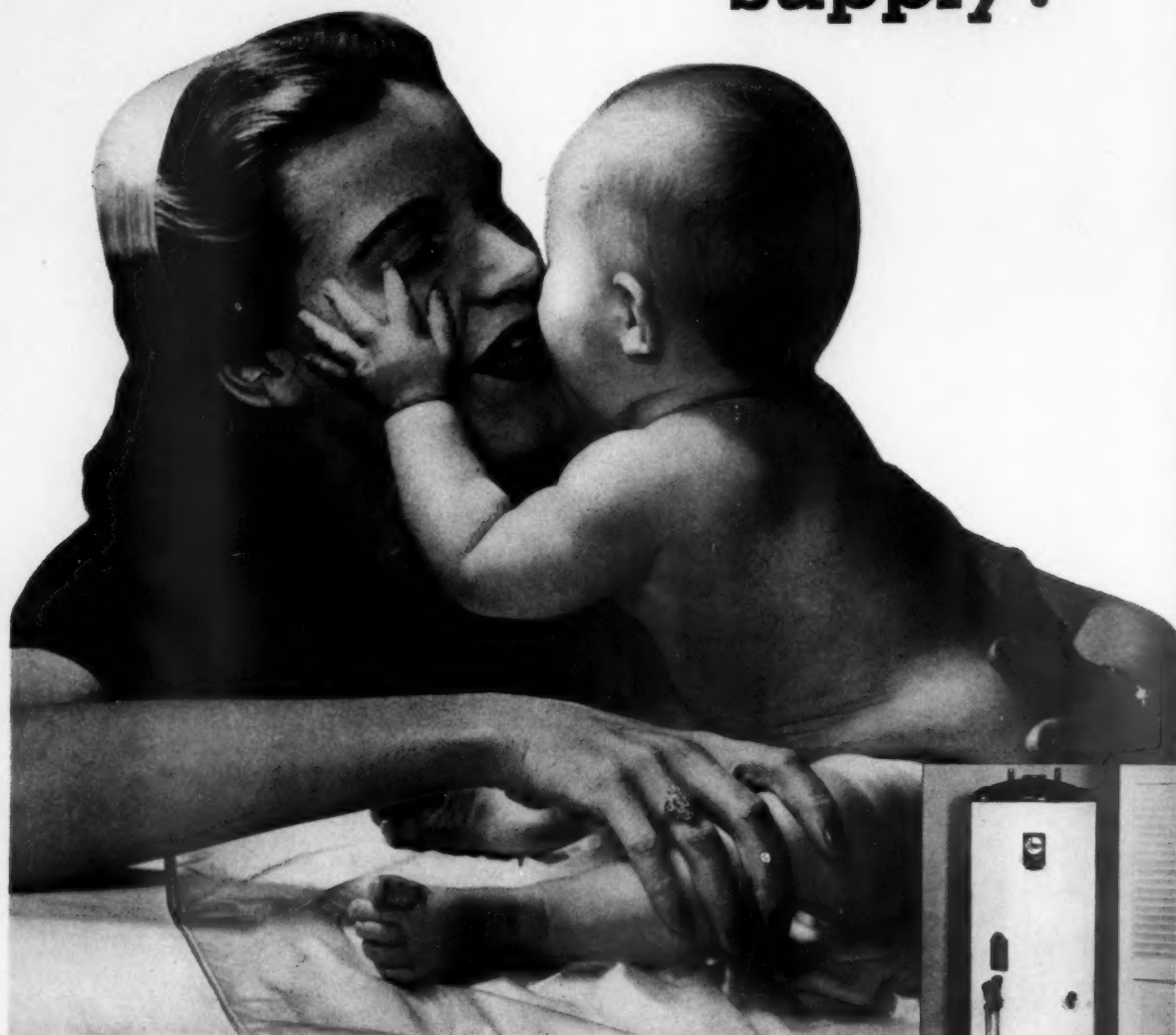
Monthly



NOVEMBER
1953

When a new baby **doubles** the laundry...

how's your hot water supply?

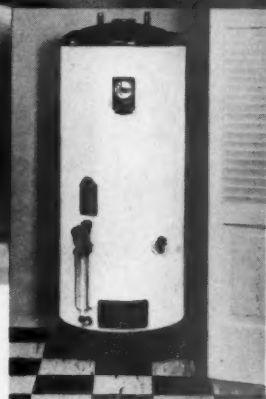


only Gas automatic water-heaters
give you tankful after tankful of hot water

 **3 times faster!**

GAS — THE MODERN FUEL FOR AUTOMATIC COOKING... REFRIGERATION...
WATER-HEATING... HOUSE-HEATING... AIR-CONDITIONING... CLOTHES-
DRYING... INCINERATION.

AMERICAN GAS ASSOCIATION



What a difference a new automatic Gas water-heater makes! It's so fast a 30-gallon tank gives more service than an 80-gallon tank run by any other all-automatic fuel. (And costs less to buy, install and run.) Shown is a **RHEEM COPPERMATIC** Gas water-heater, one of many fine "makes." Consult your Gas company, master plumber or Gas appliance dealer about the right size for your needs.

* This eye-catching A. G. A. gas water heater advertisement appeared in the September Better Homes & Gardens and the October Better Home



Erna Snyder, present Mrs. America, displays her culinary talent on a modern CP gas range at the A. G. A. Convention in St. Louis last month

IS THE gas giant really awake or merely stirring in its sleep? How active is YOUR Action Program? See how many of the following questions can be answered affirmatively in your territory. . . . Are you upgrading your sales philosophy and increasing the percentage of automatic gas ranges sold? Have you held gas company development clinics for your employees? (Wisconsin Public Service is doing it). . . . Are you forging close teamwork between sales and operating personnel in order to provide better customer service? (Boston Consolidated is doing it). . . . Are you aggressively recruiting cadet engineers and making your company an attractive place to work? (Columbia Gas is doing it). . . . Are you employing market research to plot sales potentials? (Peoples Gas is doing it). . . . Is your home service department working on constructive civic projects? (Fall River is doing it). . . . Are you selling the advantages of the gas incinerator and other major appliances to dealers and city officials? (Rocky Mountain gas companies are doing that). . . . All over the country, more and more companies are sitting up and taking action. But the big question remains—Is YOUR company doing it?

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THE MONTHLY IS INDEXED BY THE INDUSTRIAL ARTS INDEX

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STRAWS in the wind

● *Thoughts, opinions and trends for*

ARE WE SMART ENOUGH?

How smart is the gas industry? Can we effectively regulate ourselves on pipeline safety or are we going to stand by until we are engulfed by outside restrictions?

An important case history indicates that we can do the job ourselves and do it successfully. Twenty-eight years ago, utility companies and gas appliance manufacturers working together took a major step forward when they established the A. G. A. Testing Laboratories. In this way, the gas industry beat any would-be regulators to the punch. Tremendous benefits have accrued to the industry as a result of that project.

Now a second and equally important opportunity for self-regulation has arisen. The problem is to reduce transmission and distribution facility failures to

a minimum. Subcommittee 8 of ASA Committee B31.1 on Gas Transmission and Distribution Facilities has completed, studied and voted upon the first draft of its proposed pressure piping code. A second draft is being prepared and eventually will be submitted to all interested parties for their suggestions and approval.

Disagreements on details must not be allowed to interfere with the completion of this vital work. Whether your company's public safety record is excellent or just average, it is directly in your interest to support the A. G. A. program for an up-to-date and efficient pressure piping code. Surely our industry will prove that it is wide awake enough to merit the public's complete confidence!

AT YOUR SERVICE

Problem: How to prepare a manual on safe practices for standby oil gas plants? What would you do?

The vice-president of a large member company that lacked sufficient experience in this field turned to A. G. A. for the answer. Later, when the manual was on the presses, he wrote to Association headquarters: "The information you gave my company more than reimbursed us for our dues in A. G. A."

Your Association is ready to serve you in many ways. When a problem exists, let us know. If we don't have the answer, we will get it from a member company that does.

INDUSTRIAL GAS PIPING

Work on a brand new code covering "Standard Installation of Consumer-Owned Gas Piping and Gas Utilization Equipment on Industrial and Commercial Premises" is well past the half-way mark. Representatives of the A. G. A. Operating Section and two insurance groups are being added to the Association's Industrial Gas Practices Committee. When completed, the committee's final draft of the proposed standard will be presented to American Standards Association for adoption.

READY TO SERVE

Congratulations to Kings County Lighting Company for carrying out Point 10 of the industry's "Action Program" through a clear-cut public statement of appliance servicing policy.

"We offer our customers expert, guaranteed, low cost, fully insured gas appliance servicing 24 hours every day by trained company employees," the utility announces in large

advertising copy. "Our customers are cautioned against 'Fly by Night' service set-ups. For your protection we recommend you do not allow anyone to service your appliances unless they have an established place of business and carry Workmen's Compensation, Public Liability and Property Damage Insurance."

THE MALE TOUCH

Nine out of ten husbands express decided opinions when a family buys a new gas range. W. T. Trueblood, Jr., chairman of the automatic range division of GAMA reported last month. Frequently the man decides how many top burners will be on the new range, what controls are needed for the family's (and his) use, and where the broiler and oven shall be located.

SOLD ON SAFETY

A novel accident prevention training program is sponsored by The Peoples Gas Light and Coke Company. Engineers-in-training are assigned to the safety department for 12 months then returned to operating duties. Currently, the company has five safety engineers who are prospective executives in the operating division. These men are expected to play an important role in helping to reduce accident frequency.

FOR BETTER UNDERSTANDING

As part of its expanded public relations program, Southern California Gas Company has retained a special consultant trained in radio work and public speaking. He will be assigned to discuss company programs before service clubs, church and fraternal groups, and other public gatherings.

ADEQUATE PROTECTION

Characteristics of and proper installation methods for relief and energy cut-off devices for automatic storage-type water heaters are analyzed in a research report soon to be issued by A. G. A. Laboratories. The study was accomplished with the cooperation of other interested industries and regulatory bodies. It is expected to provide authoritative information on which local codes and ordinances governing use and installation of relief devices may be based.—A PAR PLAN ACTIVITY.

THOUGHT OF THE MONTH

"If consumers, like bacteria, have developed considerable immunity to selling methods, it is high time to develop some new selling methods, just as the chemists have had to develop new antibiotics."—Malcolm P. McNair, professor of retailing, Harvard University.

KEEPING IN STEP

It won't be long until the Cleveland A. G. A. Laboratories put their new office facilities to use. Completion of interior construction work in the new south wing addition, scheduled for mid-December, will be another major step in the Laboratories' program to keep pace with the rapid growth of the gas industry.

P.E.P. STIRS SALES

Gas companies report spectacular results from A. G. A.'s P.E.P. commercial gas sales campaign. Here are samples:

"... installations are at least double those of last year!"

"The campaign is moving forward in great fashion. New business load for September 1953 was 25,340 Mcf; in 1952 it was 19,460 Mcf. Replacement of old equipment in September 1953 was 16,530 Mcf against 6,880 Mcf in September 1952."

"We have never seen as much enthusiasm or as strong competitive spirit as exists among dealer salesmen in this P.E.P. Campaign!"

SAFETY SERIES

In the near future the A. G. A. Accident Prevention Committee will be able to offer companies practical visual aid materials on any phase of gas industry operations. "Get Safety into Your System," a 16 mm sound-color movie has just been released on gas production and transmission. Now in the works are a 35 mm sound-slide film and a 16 mm sound-color movie on safe practices in gas distribution. Also projected is a manual that can be used as a pattern for gas company safe practice programs.

LOOK AROUND YOU

Employees as well as executives are interested in the growth and prosperity of the gas industry. Many company officials recognize this fact and are encouraging their staffs to become individual members of A. G. A., the gas industry's largest trade association. As individual members, company employees receive subscriptions to the A. G. A. MONTHLY—the authoritative voice of the gas industry.

CHECK THEIR AGE

If you haven't already done so, why not check the rate of replacement of gas ranges in your territory? Gas range manufacturers have agreed that a satisfactory replacement rate is once every 12 years, unless radical improvements in future ranges require a faster rate.

FENCES OR TREATIES?

"Why should a pipeline stop at the border?" asks "The Oil and Gas Journal." "Why not have a treaty saying that once permission has been given to supply gas across the border, foreign customers will be treated exactly like domestic customers on the same line?"

It's a good question—worth serious consideration.

ACTION REPORT

Completion of the series of eight regional Gas Industry Development Program clinics for executives has shifted the emphasis to the company level. Wisconsin Public Service Corporation is one of a growing number of member utilities that are starting Gas Company Development Clinics to explain the program to employees and put the 15 action points into practice (see page 25).

PRODUCTION TOOL

The trend toward use of gas as a production tool continues. A leading manufacturer of office and computing equipment in New York State is building a new heat treating plant in a separate building on its property. All the company's furnaces in the new structure (approximately 20) will be gas and those utilizing other fuels in the old structure will be discarded.

CONTINUED DIVIDENDS

One of the principal attractions public utility securities hold for investors is continuity of income. Most gas company stocks are meeting that requirement. Despite inflationary pressures and rate increase delays, dividends at the end of September on 30 natural gas stocks reported by Moody's Public Utilities were slightly higher than a year ago.

The importance the gas industry attaches to dividend stability is illustrated by The Columbia Gas System, Inc. which for the second year has used a portion of earned surplus to maintain its annual dividend. In both years, depressed earnings have been attributed to delays in obtaining rate increases from regulatory commissions.



Goff R. Dunfee studies medium pressure main laid by outside contractors to gain knowledge of construction costs, methods, equipment, topography

Harry Lee and Herbert F. Byrns test soil resistivity on a high-pressure pipeline with a ground Megger using four-electrode method. They will also study corrosiveness of soils, corrosion control and control systems

Stanley P. Belonos and Eugene J. Escolse, Jr., test domestic service regulators to establish operating and testing standards as part of their training with Columbia Gas Service



Columbia solves cadet engineer training riddle

The engineering graduate today is in a position somewhat like that of the most popular freshman on campus. He is being "rushed" and "tapped" like crazy—by prospective employers. He can be choosy about the organization he is going to join. But, unlike the fraternity man, he is apt to pack up his slide rule and leave the company he has "pledged" if working conditions are not to his liking.

This is a knotty problem for the gas industry. Utilities, whose rates are strictly regulated, cannot always match high salary offers made by other industries. Yet as it expands rapidly, the gas industry has a crying need for more engineers than ever before—chemical, electrical, civil, mechanical and petroleum engineers—the gas industry needs them all.

How are gas companies attracting the engineering graduate? First, by aggressive recruiting in the colleges. Second, by stretching budgets as far as possible to meet the going engineering salaries, and third, by offering the graduate engineer a thorough training in the company.

Personnel people who do campus recruiting report that one of the first, and most frequently asked questions put to them by college students is: "Does your company have a training program, and, if so, what is it like?"

Many gas companies today can answer in the affirmative.



Eugene J. Escolas, Jr., and Stanley P. Belonos gain experience in operating the McIlroy pipeline network analyzer recently installed in the Columbus, Ohio territory



Two engineers conduct cathodic protection surveys to check output of selenium rectifier, location of ground beds, pipe-to-soil potentials, line current and stray current corrosion and solution of interference mitigation

They have found not only that their recruiting is more successful if they have well-organized training programs, but that turnover is minimized. Above all, the engineer who has a broad knowledge of the whole company, its policies and operations, is far more valuable to that company than the man who knows only one phase of its operations.

For the engineer, a well-rounded training program is equivalent to a graduate engineering course—which the company pays him to take. The benefits are mutual.

Columbia Gas System, one of the largest natural gas systems in the country, serving close to 500 billion cubic feet of gas annually to 1,250 communities in the mid-Appalachian area, conducts four engineer training programs. Each of Columbia's three natural gas operating groups runs its own training program which last from 32 to 40 weeks. The Gas Engineering Department of the System's service corporation also conducts a training program which lasts roughly two years.

The Gas Engineering Department's program is the oldest. It evolved over the years from necessity as much as from planning. Engineering graduates come to the company with little knowledge of gas engineering per se, for there are only one or two colleges that even attempt to turn out gas engineers. It's up to the company to make gas en-

gineers out of electrical, petroleum, chemical, mechanical and civil engineers.

Most junior engineers who have completed their training in the Gas Engineering Department are placed permanently in one of the three operating groups. A few are assigned to the department. But no engineer has been placed permanently unless he agreed to the assignment. Offers, which come directly from the groups, may be, and sometimes are, turned down by the junior engineers. If a man who has completed his training turns down several offers, he may be advised to accept one on a trial basis, but there is no coercion.

The junior engineer in the Gas Engineering Department starts his training at headquarters in Columbus, Ohio. This department is a pool of engineering talent and equipment available to all Columbia operating companies. It is divided into eight sections: transmission, distribution, property valuations, corrosion, piping design and welding, gas measurement and communications, gas leakage and detection, safety methods, and special assignments. Engineers in each section analyze methods, do research, make special studies of unusual problems, provide and operate special test equipment and supervise special operations for the operating companies.

The junior engineer works in the headquarters office for

COMPLETE
COVERAGE OF THE
**35TH ANNUAL
CONVENTION**
OF
**AMERICAN GAS
ASSOCIATION**
WILL BE CARRIED IN THE
**DECEMBER
A.G.A. MONTHLY**

only a small portion of his time, for the department's activities take him into the field to work directly with personnel of the operating companies. By being rotated among the various sections and working "on location" in the operating groups, he gains both technical knowledge and a fundamental over-all knowledge of Columbia's operations.

C. F. de Mey, vice-president and chief engineer of Columbia's service company, and John E. Overbeck, assistant vice-president, who have guided the Gas Engineering Department's training program through its evolution, have much good advice for any company setting up an engineer training program.

Mr. Overbeck points out that, although engineers are at a premium these days, it is essential while interviewing recent or prospective graduates not to overemphasize the success which the engineer may attain. It may be difficult to keep him satisfied later on.

Mr. de Mey says that it is well to explain to the young engineer that he is going to be learning and doing the routine jobs for about six months. In an interview he emphasizes the fact that specialized engineering as such is not often needed in the gas industry, but that the business requires a broad range of engineering knowledge in which a specialty such as chemical engineering is useful.

If, during an interview, it is learned that the applicant wishes to specialize or has visions of glory—building huge plants, bridges or super-highways—it may be wise to discourage him from becoming a gas engineer. Overlooking this situation because of the engineering shortage results in misplaced and dissatisfied engineering employees.

Mr. Overbeck says that applicants frequently ask, "What kind of a job will I have five or ten years from now?" A reasonable question, but extremely difficult to answer.

"Our general plan is to explain that during the first year or two their progress is apt to be more or less automatic (assuming that they make the proper progress), but the rest is up to them," Mr. Overbeck states. "We try to explain that they will be competing on an equal basis with other engineers; that there are many opportunities in the company, but it is up to them to show that they are the right ones for the better jobs."

Once an engineer is hired, the big job is to fit him into

the proper field. During the first two years, rotation from one type of work to another furnishes an opportunity for the staff to learn which phase of engineering he is best fitted for. This helps the junior engineer to become familiar with other phases of the gas industry before returning to the work which has been mutually selected by him and the company.

According to Mr. de Mey, it is particularly important to get to know the boys personally and for them to feel free to discuss any problems with a senior engineer.

All during the training period senior engineers or department heads hold periodic discussions with the trainees. It is made clear that their superiors are trying to help the junior engineers decide where they fit into the organization best—for their own good and for that of the company.

"During this period, patience is a very important factor. The supervisory staff must realize that the young engineer is 'growing up,'" Mr. Overbeck points out.

Engineering trainees who are not given productive work grow restless and discontented. They want to feel that they are accomplishing something. But it is not always easy to find work that the novice can handle. The engineer-in-training stays "at home" until he has learned enough so he can take some active part in a job, for the first impression he makes "on the outside" is important. If he is useful, doing even simple work in the field, he is not resented by older engineers, who have little respect for a young fellow who stands around with his hands in his pockets.

Small jobs are generally best, for they give the trainee the satisfaction of completing something. On long jobs, each step of progress must be explained.

Another must is teaching engineers to understand "line" and "staff" organization. Generally, engineering work is done on the staff basis.

The training of engineers is not limited to engineering problems. The young engineer must be instilled with the importance of getting along with other people. This is essential in the gas industry because of the great number of contacts made with regulatory bodies, municipal or county officials, trade and company committees and other groups. Mr. Overbeck recommends many discussions on this subject. Mr. de Mey says that he has found that many young engineers respond to the idea of becoming dedicated to public service. Many applicants have not considered the idea that working for a public utility means contributing to the general public welfare. In some interviews that idea strikes a spark.

Supervision applied with a light touch is wise. "We feel that the engineers in training should be given as much responsibility as possible so that they have the chance to use their initiative and imagination," Mr. Overbeck asserts. "Explain to them what is wanted, then let them proceed. Check their progress from time to time, however, so that they get the feeling of being properly supervised."

Another touchy problem is that of fitting the junior engineer into the over-all operations of the company. Placement of the engineer must not affect the advancement of non-technical employees.

There have been cases in which non-technical employees have asked to be given the same training opportunities the junior engineers have. Whenever possible, these requests

(Continued on page 44)

Mrs. America wins wide support



Erna Snyder, current Mrs. America, posing with automatic gas range, gas incinerator and gas water heater in the official Mrs. America home in Ellinor Village, Daytona Beach, Fla., where her successor in the 1954 contest will be installed by the gas industry as a national symbol of homemaking. Mrs. Snyder made numerous personal appearances during the A. G. A. Convention last month

a PAR activity

Preparations for the 1954 Mrs. America

campaign, a promotion with tremendous national potentialities for the gas industry, were gaining momentum as the November MONTHLY went to press.

On October 21, The Metropolitan Gas Heating and Air Conditioning Council threw its full support behind the Mrs. America campaign. Frank Barnitz, domestic sales manager, The Brooklyn Union Gas Co., Brooklyn, N. Y., announced that the Council feels the Mrs. America contest can be as effective a promotional vehicle for gas house heating as for other phases of the gas industry. He announced that the Council will urge all its companies in New England, New York and New Jersey to obtain "How To Do It" portfolios from A.G.A. and speed up state elimination contests.

A.G.A. is sponsoring the huge promotion which will establish next year's winner of the Mrs. America title as a national

symbol of homemaking. Entry blanks will appear in *Better Living Magazine*.

Early in 1954, gas company members of A.G.A. will stage local elimination contests in cooperation with the 9,000 supermarkets that distribute *Better Living* coast-to-coast. The national winner will be rated primarily on her ability to cook, shop and run her household. For the final elimination, state winners, plus one each from Canada, the District of Columbia and Hawaii, will set up house in homes on Mrs. America Drive in Ellinor Village, Florida. All 54 of these homes will be equipped with the latest model gas appliances.

The entrants will be judged on their performance on these all-gas appliances. The grand final Mrs. America winner will reside for a week or more after her selection in a deluxe Ellinor Village home furnished with gas appliances and all-gas air conditioning.

In addition, next year's Mrs. America will receive a complete New Freedom

Gas Kitchen for her own home and a four-week grand tour of Europe for her entire family by Scandinavian Airlines. Later this year and early next year, Mrs. Snyder will make personal appearances for Public Service Electric and Gas Co., Newark, N. J., and The Brooklyn Union Gas Company.

Already signed up as gas appliance sponsors of the 1954 contest are: Inciner Division, Bowser, Inc., with automatic gas-fired incinerators; Detroit-Michigan Stove Company with automatic gas ranges, and John Wood Company with automatic gas water heaters. Appliances of these manufacturers have been installed in the Mrs. America home in Ellinor Village.

The gas industry is also tying-in with the present Mrs. America winner, Erna Snyder of Kutztown, Pennsylvania.

Complete details of the 1954 promotion, including a "How To Do It" portfolio, can be obtained from the A.G.A. Promotion Bureau.

Market research removes the blindfold

By GEORGE A. MORGAN

Superintendent, Market Research Department, The Peoples Gas Light and Coke Co., Chicago, Ill.

● The need for scientific market research studies by local companies is spelled out in the first "Action Point" of the Gas Industry Development Program. In the following condensation of his remarks at gas company development clinics, Mr. Morgan describes one approach to this subject. He shows how Peoples Gas started market research on a small scale years ago and now has one of the most elaborate programs in the entire industry.

Our experience closely parallels the "why", "what", and "how" of market research activities as expressed in the American Gas Association brochure. This brochure indicates that the scope of a market research department can be very broad or restricted.

In our case the duties do not include some of the functions frequently carried on by market research departments, particularly those pertaining to the day-to-day operations of the sales division, such as preparing salesmen's potentials, sales programs, and appliance pricings. On the other hand, the department carries on a number of functions that might not usually be thought of as market research, such as hourly and daily load analysis and rate studies.

Background facts

Our present Market Research Department was formed on April 1, 1949 and reports to the comptroller of the company. It was the outgrowth of a Market Statistics Section initiated in July 1937.

Our previous market research activities, because they were sporadic, had not given continuing satisfactory results. Management felt that there should be a continuing effort to obtain from customers by surveys and other means, additional information important to the understanding of their present and future loads. More adequate accumulation



Chicago proves a valuable source of information for market studies

and interpretation should be made of a vast amount of valuable market information available from sources outside the company.

Such information, along with that presently being obtained, was needed for making better sales forecasts and more thorough analyses of the reasons for increases and decreases in gas and appliance sales. It was required to furnish the basis for analyses that would assist management in rate, operating and sales policies; for preparing estimates of hourly and daily sendouts, particularly on the peak hour and peak day, for the Dispatching Department and for other operating and budget purposes. Also, for estimating peak-day and peak-hour loads by square mile for use by the Engineering Department in system design and gas supply problems. (The accompanying map of Chicago showing the 240 square mile areas over which we distribute our load estimates and certain other company information should make clear why these detailed estimates are necessary.)

Other problems

All these needs are still with us today. Other problems have been added. The rather frequent regulatory commission proceedings require well-supported analyses of the company's present and prospective loads and revenues. One cannot overlook the great need for presentations of information concerning our business in connection with public relations and employee relations.

It was in the light of these circumstances that the decision was made to create a Market Research Department.

In 1937 the immediate need was for an explanation of the considerable drop in residential non-heating sales from 1929 to 1933 and their failure to recover from 1933 to 1937. This, despite the fact that the number of bills had regained the 1929 level and quite a number of load-building appliances had been sold in the meantime. Residential gas sales in 1937 were 17 million therms less than the sum of the 1929 sales and the estimated business added from 1929 to 1937.

After considerable study of information in the company and elsewhere, after making a number of customer surveys, and after consultation with persons in other departments and outside the company in related lines of business, we assigned to each of ten factors a quantitative portion of the 17 million therm loss which together amounted to 60 percent of the total loss. The remaining 40 percent was explained by three other groups of factors on a qualitative basis. The most serious loss was the replacement of gas tank water heaters by coal heaters, estimated to account for 20 percent of the total. Second in importance was the decrease in the number of gas pilots in oil burners.

In addition to providing a partial answer to a management problem, this study demonstrated the feasibility of using customer survey as a source of information and the need of maintaining a file of detailed market data ready to be drawn upon for special studies.

In February 1938, the Market Statistics Section submitted a plan for setting up a permanent sample of residential buildings, including those with no gas service, and maintaining a file of tickets on which all available information concerning these buildings and the families living in them would be posted. The permanent sample would in time provide a basis for estimating the number of gas and competitive appliances in service by various types of buildings and areas of the city.

This plan required the purchase of a set of Sanborn maps for the city of Chicago. These maps, originally designed to be used by fire insurance companies, show the location, type, and construction of all buildings. They have made it possible to classify and inventory the buildings from which the sample was selected, and to keep the sample up-to-date, since buildings constructed and wrecked are shown by map corrections issued annually.

Purchase of the maps, which are quite expensive, was justified partly on the ground that they would also have other uses. They are used frequently by the Engineering Department in laying out mains and services, especially for indus-

trial plants and housing projects. They are used in coding and classifying gas accounts in residential, commercial and industrial buildings. They have also been used by the Meter Reading Department in setting up routes, and by Distribution and Claim Departments in connection with fires, explosions, etc. They could be used in studying main extension policies.

We now have a complete set of Sanborn maps for Chicago, supplemented by our own field maps in a few newly developed areas which are not yet mapped by the Sanborn Company. In the meantime a new building file has been developed, and buildings constructed from 1938 through 1950 have been added to the original sample.

Permanent sample

Our sample was designed so that it could be used as a source of information for all sorts of market studies.

All buildings in the city as of 1938 containing living quarters were classified into ten types. For the full sample every sixth building of each type was selected. This full sample was divided into four parts, each consisting of every fourth sample within each type of building.

Current data are collected only for the second and fourth parts, referred to as #2 and #4 samples, the first and third being kept in a separate file in order to have supplementary samples available for special studies. The #2 sample was further broken down by selecting every fifth and every tenth ticket in each building type, referred to as #2-5 and #2-10 samples. These can be used when a smaller sample is desired, the #2-10 tickets providing a sample of one in 240 buildings in Chicago, and the combination of #2-5 and #2-10 tickets forming a sample of one in 120.

The ticket for each sample building, called the "Market and System Planning Record", is a folded 5" x 8" form. There are three types—one for single-family residences, one for two-apartment buildings, one for all other types of buildings.

When the tickets were first set up, construction information was transferred from the Sanborn maps; 1931 appliances

and gas account information from the 1931 changeover surveys; and current data on gas accounts from meter reading books. For all #2 and #4 samples, surveys dealing with types of gas and competitive appliances in use are obtained approximately every five years, the work being staggered so that one-fifth of the city is covered each year (as illustrated by the square mile map that has been distributed).

Some information, such as age and condition of building, owner or renter, etc., is obtained at intervals usually exceeding five years. Surveys are made by shop men in connection with meter change for age orders and other inspections, meter readers, claim department inspectors and trained interviewers in the market research department. Information is taken from appliance sales tickets, automatic water heater and space heating inspection tickets, sales department records, etc.

Information as to gas consumption is recorded on the #2-5 and #2-10 samples only, at five-year intervals, in addition to 1931. Additional gas consumption transcripts that are gathered for special analyses are also entered on the sample records.

Our department is continuing the work of the old Statistical Department. We keep records and issue regular and special statements on gas sales, customers and revenue, appliance sales and temperatures and degree days.

We prepare monthly and quarterly a

short memorandum explaining the increases and decreases in gas sales by class of business, and annually a somewhat more detailed analysis.

Each year we analyze the gas automatic water heaters, refrigerators and heating equipment sold in Chicago to determine where in the city sales are being made, type of user, number of additional dwelling units served, and appliances replaced. Occasionally we make studies of appliances sold by makes and models.

Heating picture

A file on gas central heating plants in service has been maintained and is used in answering all sorts of questions. From this file, we produced a report giving a complete picture of heating plants in service at the end of World War II—by age, type and make of equipment, type of premises, square mile area, and other classifications. Because the number of customers served has greatly increased in recent years, the company is considering an IBM record for such information.

Each spring (from the new building file previously referred to) a report is issued on buildings completed during the previous year which shows how many buildings by type were constructed in Chicago, what square mile areas they were built in, and the types of gas and competitive appliances installed.

We continuously make estimates as to the number and saturation of appliances using gas and other fuels in the city, by type of building and area.

We estimate the average and typical consumption of various appliances and answer many questions as to typical bills.

The department makes load characteristics studies and analyzes studies made by others. It gathers and issues information on prices and relative efficiencies of competitive fuels, and makes use of such information in comparative cost studies.

Records are maintained of the company's present rates and rate history, and rate sheets are distributed to company management and supervisory personnel as well as to interested persons outside the company. The department keeps informed on rates of other companies and from time to time makes comparisons of our rates with those in other cities. It assists management in designing proposed rates and estimates their effect on the company's revenue.

We maintain a statistical data book dealing with the company's operations for the use of the officers. There is also a

considerable amount of time spent assisting in the preparation of exhibits and testimony for hearings before regulatory bodies.

One of the important parts of our work is the preparation of short-range and long-range forecasts of gas sales, gas requirements and supply, revenue, and customers. This is accomplished in cooperation with the various departments of the Sales and Operating Divisions. These are used for budgets, long-range planning, current gas supply and operating problems and in exhibits before the Federal Power and Illinois Commerce Commissions.

Besides estimates of annual and peak-day gas requirements, we frequently prepare estimates of daily sendouts, varying them according to the time of year, hypothetical temperature ranges, and week-days or weekends. The Operating Division is kept posted on estimates of gas requirements in relation to temperature for several months ahead, and is furnished peak-day and peak-hour estimates by square mile for periods in the future for system planning purposes.

These forecasts are made possible by the compiling and analyzing of the information I have just referred to, plus the review of current literature dealing with economic factors and census releases, and by staying in close touch with the planning bodies of the city and the nation.

The personnel of the department, in addition to clerical help, consists of engineers and market and rate analysts interested in the general operating, statistical, and cost problems of the company. They are members of the American Marketing and American Statistical Associations as well as other related professional associations. Since several of the people in the department are somewhat specialized in education or aptitudes they are able to help other departments with company problems which deal with sampling, surveying, charting, mathematics, and the like.

We believe that concentrating the work I have outlined in one department as a full-time job avoids overlapping of effort and centralizes responsibility for judging the value and degree of accuracy of information gathered. It allows us to assemble a group of employees proficient in the analysis of information and familiar with sources of data and over-all company problems.

Presto, Gas!

● Management personnel of the Cleveland Electric Illuminating Co. are still laughing at the unexpected choice of words by Michael M. Lucak, city transit board chairman, in a talk to them early this week.

Lucak was making the point that there were some noticeable differences between the illuminating company's type of operation and that of the transit system. To illustrate his point, he remarked:

"When a housewife wants to make cookies, she goes to the gas range, turns on the gas burner and, presto, there's gas."

The C. E. I. people, whose company has spent bundles plugging the merits of the electric range, fell into a stunned silence at the first mention of the word "gas." And as Lucak naively continued his reference to the competing kitchen fuel, there was first an embarrassed giggle and then a roar of unrestrained laughter from the audience.

—Cleveland Plain Dealer

GAS HEATING LOAD

Gas heating and related loads

A broad perspective of gas house heating economics and their relationship to other load factors is provided in a new progress report published by American Gas Association. Millions of words and scores of articles have been printed on gas house heating, but this is the first attempt to tie together all factors and elements into one over-all study.

Highlighted in the "Study of Gas House Heating and Related Load Characteristics" are actual case histories showing how individual gas utilities discovered specific answers to their house heating problems. Some of the major problems analyzed are:

- (1) How intense is the demand for gas house heating?
- (2) Among what types of households is this demand predominant?
- (3) What are the characteristics of this load?

- (4) What is the relationship between gas house heating and other gas appliances?
- (5) Is dual fuel an answer to house heating's low load factor?

One important purpose of the study is to encourage other gas companies to undertake load characteristic studies with particular emphasis on the gas heating load. Already, at least five gas companies have indicated that they will undertake 12-month tests covering the present heating season. In addition, one company has made available to the A.G.A. staff field data which it had gathered several years ago but which had not been completely processed. The results are included in the present publication.

Two important A.G.A. groups, the Committee on Economics and the Rate Committee, collaborated on the house heating study. While the final report and evaluation is not expected until the end

of the year, the analyses completed to date contain data from more than 40 member companies and should prove valuable to other companies in their market study preparations. As a special aid to the user, the report includes a bibliography evaluating each reference.

A number of highly significant conclusions are indicated in the report.

In premium-priced gas areas such as Philadelphia and New York's Hudson River Valley, the highest income groups maintained the greatest acceptance of gas heating. Conversely, the lowest income groups had the lowest gas heating saturations. Even an old, traditionally low-priced natural gas area like Pittsburgh exhibited the same tendency: while households valued over \$20,000 represented only two percent of all customers, the gas heating saturation of this group was 100 percent, compared to only 42 percent for all customers.

The group of investigations further-

more offer the first postwar quantitative measures of the impact of gas heating on other parts of the residential gas market. Case studies in Chicago, Philadelphia and the Hudson Valley area indicated at least double the gas automatic water heating saturations as well as higher gas refrigeration saturations among gas heating users as compared with those using other heating fuels. Pittsburgh, however, showed only slightly larger amounts of gas water heaters among the users of gas comfort heating. An analysis of 50 large cities made with the cooperation of the United States Bureau of Labor Statistics corroborated the collateral relationship between gas house heating and gas water heating.

Gas cooking, on the other hand, showed no similar relation. The degree of electric cooking saturations seems to be dependent more upon the effectiveness of the promotional efforts made by the competing industries in each city. As a matter of fact, the utility studies present considerable evidence that the same newer, high-priced homes which are most apt to be gas heated are predilected toward having "all-electric" kitchens. One eastern natural gas city, Pittsburgh, with a 94 percent average gas cooking saturation

has found that the most expensive homes (over \$20,000) have only 67 percent gas cooking saturation. Further analysis of the electric and gas cooking saturations within the same income groups and by types of structures did present evidence that gas-heated homes maintain slightly higher gas cooking saturations than do oil heat users within the same categories. The implication is that gas heating did aid somewhat in preventing even further inroads of the gas cooking load by electric—at least in two of the cities concerned.

The study was originally authorized by the Association's Board of Directors in the fall of 1951, and active work commenced in March, 1952. The joint subcommittee of the two sponsoring committees, which has supervised and directed the analysis, includes: B. P. Dahlstrom, Public Service Electric and Gas Co., Newark, N. J., chairman; G. A. Morgan, The Peoples Gas Light and Coke Co., Chicago, Ill., vice-chairman; E. R. Conner, Columbia Gas System Service Corp., New York, N. Y., and J. R. Gardner Central Hudson Gas & Electric Corp., Poughkeepsie, N. Y., for the Rate Committee, and L. C. Peters, Laclede Gas Co., St. Louis, Mo., chair-

man; G. C. Griswold, The Brooklyn Union Gas Co., W. J. Herrman, Southern California Gas Co., Los Angeles, Calif., and W. B. Tippy, Commonwealth Services, Inc., New York, for the Committee on Economics. Reports included in the initial publication were written by O. E. Zwanzig and H. C. Mendell of the A.G.A. staff, with most of the field work or data being gathered or furnished by the cooperating utilities.

Individual company studies presented in this report are an indication of the type of data available to most companies, and some of the methods used to obtain that data. It is hoped that these reports will induce still more companies—both large and small—to undertake similar work that will be useful to them locally, as well as to the gas industry as a whole. This would give tremendous impetus not only to a further understanding of problems related to the gas house heating load and would strengthen the industry's concerted nation programs.

A limited number of copies of the "Study of the Gas House Heating and Related Load Characteristics" is still available from Bureau of Statistics, American Gas Association, 420 Lexington Ave., New York 17, N. Y. at \$1.00.

Field survey subcommittee tours gas pipelines by air



Members of special ASA field survey group to study gas pipeline problems meeting in Columbus, Ohio are: (Seated, left to right): Walter H. Davidson, Chairman F. A. Hough, C. D. Alstadt, Norman F. Blundell; (Standing): L. L. Elder, M. M. Braidech, Carl T. Kallina, A. J. Shoup and B. T. Mast

MEMBERS of a special group studying possible changes in requirements of the American Standards Association code for natural gas pipelines met for the first time in Columbus, Ohio, recently. Heading the group was Frederic A. Hough, vice-president, Southern Counties Gas Company.

Mr. Hough is chairman of Subcommittee

No. 8, of the ASA Sectional Committee on Code for Pressure Piping, ASA B31.1, which is engaged, under the sponsorship of the American Society of Mechanical Engineers, in revising the recently published Section 8, on Gas Transmission and Distribution Piping, of the B31 Code. Mr. Hough serves as chairman of the subcommittee by virtue

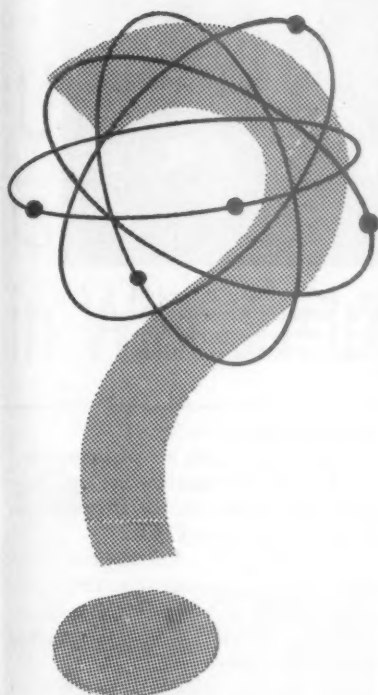
of his appointment as one of the two official representatives of the American Gas Association to the sectional committee.

The Columbus meeting of the subgroup on field survey was the first conference of the nine members since their appointment by Mr. Hough. During the four-day get-together the officials made a 1,200-mile aerial tour of gas pipeline routes in five states—Ohio, West Virginia, Virginia, Pennsylvania and Maryland.

Members of the subgroup include: Mr. Hough; C. D. Alstadt, supervisory engineer of the Columbia Gas System Service Corp., Columbus; Norman F. Blundell, assistant chief engineer, Trunkline Gas Co., Houston; Walter H. Davidson, general superintendent, Transcontinental Gas Pipeline Corp., Houston; John H. Carson, vice-president, the East Ohio Gas Co., Cleveland; M. M. Braidech, director of research, National Board of Fire Underwriters, New York City; Carl T. Kallina, Division of Gas Certificates, Federal Power Commission, Washington; A. J. Shoup, engineer, Texas Eastern Transmission Corp., Shreveport, La., and B. T. Mast, Tennessee Gas Transmission Co., Houston.

L. L. Elder, assistant senior pipeline engineer, Columbia Gas System Service Corp., Columbus, was acting secretary.

Planes for the aerial survey were furnished by Texas Eastern. During the trip members of the subgroup studied the types of terrain involved in the construction and operation of pipelines and other related problems.



Electronics— now or in the future?

Top level utility accounting executives came up last month with answers to some of the big questions in electronics. Are the gas and electric industries ready for widespread application of this high-speed computing equipment? Will gas and electric companies ultimately require custom-built electronic equipment to accommodate their specific needs? If so, what should they do to help bring about this objective?

Some 115 utility executives invited from companies representing 35 to 40 percent of the gas and electric meters in the country pondered these and other questions during a unique Electronics Seminar in New York. On October 7 and 8, they listened attentively to representatives of Burroughs Corp., Radio Corporation of America, Remington Rand, Inc., National Cash Register Co., and International Business Machines Corporation. On the third day the utility representatives met in private session for frank discussion of the industry's position.

A leading independent authority in the field, Dr. Howard H. Aiken, director, The Computation Laboratory of Harvard University, aptly summed up the present situation.

"The manufacturer is not so sure what he ought to do. You, the utility executive, have to figure out what to do with these electronic machines *before* you get them," he declared. "You have to start now to educate personnel in your own companies and plan for what is coming. Maybe you should collar some of your engineers and convince them that they should go into the accounting end of your business. Certainly you should send your people to school.

"Educating your people on the logic of these machines is your big problem," Dr. Aiken challenged. "You alone can solve it!"

Accounting leaders of American Gas Association and Edison Electric Institute who had planned the joint seminar noted that at least one large gas company and one large electric company are currently exploring ways to use electronic equipment for their entire accounting operations. Leading the discussions were Bernard S. Rodey, Jr., chairman, A. G. A. Accounting Section and W. D. Virtue, chairman, EEI Accounting Executive Committee. Background work of the two associations in

the electronics field to date was outlined by John H. W. Roper, chairman, A. G. A. Electronic Accounting Machine Developments Subcommittee, and F. J. Porter, Jr., chairman of a similar committee of EEI. Extensive preparation for the joint seminar had been made by these two committees.

Participating executives showed intense enthusiasm in the discussions. They agreed generally that a satisfactory Utility Electronic Accounting System is still around the corner, but that use of electronics can be a practical reality for some of the large companies. Prospects for use by smaller companies will be brighter some years from now when electronic machines may be able to do most of a company's operating records.

The discussions disclosed a strong feeling that introduction of high-speed computing machines will knit accounting groups more closely together and will require direct liaison with top management. Many vice-presidents of gas and electric companies joined in the seminar.

Strong emphasis was placed on the need for programming before a company enters the electronic computing field on a large scale. The audience agreed with Dr. Aiken that utility men must decide in advance what they want electronic machines to do. It is imperative that once a machine is purchased, the company be able to incorporate every conceivable accounting function in it to obtain maximum utilization.

John H. W. Roper, A. G. A. committee chairman, asked the manufacturers:

"What can we do to help you help us?"

Consensus of utility and manufacturer opinion was that gas and electric companies still have not completely shown the manufacturers what type of equipment and what specific requirements they need. A number of serious problems remain to be solved. These include: how to match input and output in printing, random access, sorting, and the high cost of converting original data into coded form. The utility men discussed differences of the various electronic computing systems and such questions as: Whether to store information through use of magnetic tape, magnetic drums, cathode ray tubes, magnetic cores, or crystals. General feeling was that the type of equip-



Speakers who discussed electronics utilization during A. G. A.-EEI seminar in New York: (Left to right) Bernard S. Rodey, Jr., chairman, A. G. A. Accounting Section; John H. W. Roper, chairman, A. G. A. Electronic Accounting Machine Developments Subcommittee; Dr. Howard H. Alken, director, The Computation Laboratory, Harvard University; W. D. Virtue, Ralph H. Smith, F. J. Porter, Jr., EEI accounting officials, and Ralph F. McGlone, A. G. A.

ment selected should be dictated by the requirements of the job to be done.

One utility executive suggested that the problem of electronics transcends any one phase of the accounting field. He declared that increasing use of electronics equipment will bring increased control of costs.

The vice-president and comptroller of a large gas and electric company in the northeast said of the seminar:

"We learned a lot about this field that will be very valuable to us in assessing various phases of equipment as they became available. Even if it takes five minutes to get complicated information from one of these machines, that will be years faster than we are getting it now!"

Chairman Rodey of the A. G. A. Ac-

counting Section, gave the MONTHLY his own analogy for electronics.

"Consider *input* the equivalent of our journal entries or day-by-day transactions," he said. "Consider *storage* (of information) as the equivalent of our ledgers. You might even call it 'micro-ledgers.' Consider *output* as the equivalent of our financial, statistical and operating reports."

Ralph F. McGlone, The East Ohio Gas Co., Cleveland, and Ralph H. Smith, The Cleveland Electric Illuminating Co., Cleveland, singled out the need for cooperative approaches to electronics utilization.

The vice-president and comptroller of a large gas and electric company in the Middle Atlantic States called for research and application of electronics

on an industrywide level.

"Let's put it into actual operation."

"A very informative meeting," declared one executive. "Well worth the trip from the West Coast!"

"This thing is sufficiently out of the stage of pure science and into the realm of possibility to warrant a sizeable expenditure of money on it," remarked another executive.

One utility man called for "ways of sending information out to customers in rapid form. We must do this," he said, "in order to have good public relations, or some day we may not have privately owned utilities!"

A show of hands indicated strong sentiment for future meetings of this off-the-cuff type as new developments may dictate.

Supplymen's Fund winners pushing gas storage research

FOR THE SECOND consecutive year, the Natural Gas Supplymen's Fund Fellowship has been awarded to further student work on "Displacing Water with Gas and Gas with Water in Storage Operations."

D. P. Hartson, Equitable Gas Co., Pittsburgh, Pa., chairman of the A. G. A. committee managing the fund, has announced that the 1953-54 fellowship was won by Joseph E. Warren, a candidate for Ph.D. at Penn State University. Last year's winner, Paul Root, has completed his work at Penn State on the same subject and will deliver a paper based upon his thesis before the

American Institute of Mining and Metallurgical Engineers in Pittsburgh in December. Mr. Root's paper soon will be available from A. G. A. Headquarters upon request.

Managed by A. G. A. since 1927, the fund furthers the study of research on natural gas studies by college students working for advance degrees. Mr. Hartson noted that over the years, fellowship winners have completed many valuable theses on natural gas production, transmission and storage operations.

In the past the gas industry has largely overlooked the work accomplished by win-

ners of this important but little known fund. Despite the valuable work accomplished on natural gas subjects by fellowship students, to date few of the winners have entered the gas industry upon completion of their studies.

Assisting Mr. Hartson on the Natural Gas Supplymen's Fund Committee are: Elmer Schmidt, vice-president, Lone Star Gas Co., Dallas, Texas; N. C. Gowen, president, United Gas Pipe Line Co., Shreveport, La.; George E. Welker, consultant, Oil City, Pa., and George H. Smith, assistant managing director of A. G. A., committee secretary.

By A. G. BUR

Sales Manager
Wisconsin Public Service Corp.
Green Bay, Wisconsin

● It's called the Gas Industry Development Program but fundamentally it's a "Gas Company Development Program." From time to time we will report on specific action that individual utility companies are taking to put that program into effect. This month Mr. Bur, in an exclusive report to the MONTHLY, describes his company's aggressive plans to carry out Points No. 3 and 4 of the Action Program by pushing replacement sales and upgrading appliance sales to new customers and 57,000 gas customers now on the mains.—THE EDITORS

"Upgrading" is the word in Wisconsin

The new "Action Program" for Gas Industry Development has given my company a valuable opportunity to reexamine its gas appliance sales policies and has stimulated many plans that until recently were only in the "thinking" stage.

We are now making plans to hold miniature "Gas Company Development Clinics" in each of our gas divisions—both straight gas and combination. Local management and supervisory organization representatives from all departments will attend.

At each miniature clinic, we will discuss the A. G. A. 15-point program step by step. We will show not only what the industry is doing nationally, but what we as a company are doing to comply with the 15 points and what we plan to do in 1954.

We believe that this approach will raise a lot of interest, will bring confidence to our gas organization and more support for our promotional programs.

We are also starting immediately to gradually upgrade our sales so that by the end of 1954 two-thirds of the gas ranges we merchandise will be CP or better. Already 50 percent of the gas ranges merchandised in our biggest straight gas property are CP or better. Within a year or two, we hope that all gas ranges merchandised by our company will be in this high category.

Our management believes that our gas ranges should offer the advantage of a timed convenience outlet. In fact, our trend is definitely in the direction of the "cold" range. We want to make certain that every gas range we merchandise does a good broiling job and provides sound basic performance on top burners and in the oven. Home service and other

channels tell us of an increasing amount of broiling that is done in the homes in our territory. Eventually, we hope to reach the point where all the gas ranges we merchandise are completely automatic.

We are concentrating on ranges, because our big quality problem is in that field. Our experiences with cheap gas ranges and the bugaboo of used gas ranges that move continually from house to house have proved the need for a serious program of upgrading. We are now developing a concrete program to get off our mains all old ranges that should be classified as "junkers". Special Old Stove Round Up meetings and dealer displays are an important phase of this program. Basically, though, the program involves a lot of good hard plugging.

In Sheboygan, our largest gas division, 20 out of 21 appliance dealers are cooperating in our Old Stove Round Up. The September 21 edition of the *Sheboygan Press* ran 14 tie-in advertisements paid for entirely by dealers plus a central advertisement by the gas company. Papers serving other communities along our high pressure system had similar results.

We would like more advertising of CP and fully automatic models, but that will come in time with the balance of the program discussed in this article.

Along with our Old Stove Round Up, we assisted our dealers with their window displays.

Quality service

We are sold on the philosophy that the gas range should be modern and provide top-quality service to the customer. Whenever we come across an old range that does not convert well to natural gas we offer the customer an especially attractive trade-in allowance toward a modern and satisfactory gas range.

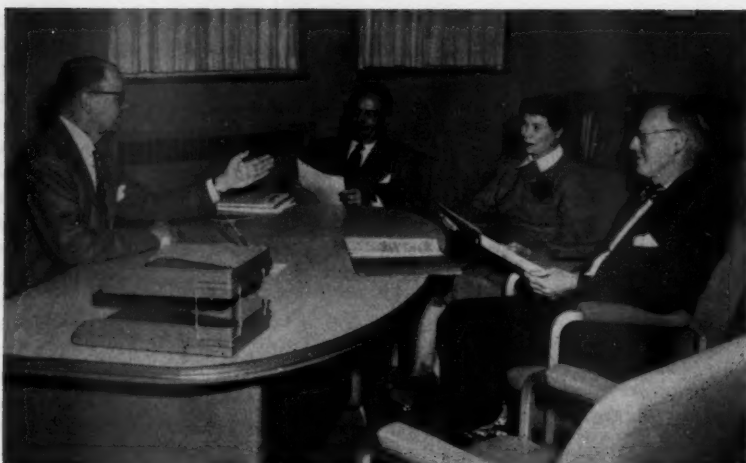
Right in our own backyard is a good example of the need for high-quality gas range sales. One territory where we deliberately moved in a bunch of cheap and second-hand ranges to get gas load during the latter part of the depression, is showing up in a reverse style in our sales figures. In the two cities where this situation occurred, we are losing the gas cooking load.

We attribute the majority of this loss to the low quality of ranges in use and the hurried steps that we took some years ago.

In 1946 we initiated an annual Home



*Company's development
clinics to spur
automatic range sales*



Gas industry's 15-Point Action Program and feasibility of in-company program and clinic at Wisconsin Public Service Corporation are discussed by (from left to right): A. G. Bur, sales manager; C. E. Logeman, residential and commercial sales supervisor; Kathryn A. Heffernan, home service supervisor, and E. V. Christensen, public information supervisor



A. G. Blitz, dealer sales supervisor for Wisconsin Public Service, congratulates Sheboygan gas appliance dealers who attended kick-off meeting for Old Stove Round Up on their tie-in advertising in local newspapers. The successful 15-ad campaign followed 1953 Pied Piper theme

Economics Kitchen Replacement Plan which was original and unique and has since been widely copied. Every school teaching home economics in our territory, whether it be a college, vocational or high school, uses this plan. Each year when the students enter their home economics classes they are supplied with brand new top-quality gas ranges. The program actually pays for itself. There is the additional fact that it provides strong and frequent contacts between our home service girls and home economists of our schools.

No one single item is a panacea for

a company's ills. However, my company is convinced that if we take the initiative and upgrade our own sales, we will encourage similar activity by our dealers. When customers generally become aware of our high-level merchandising position, they will stop and think before they buy a cheap, inadequate gas range. This cannot help but have a good effect upon dealers and eventually upon their profits and their interest in gas promotion.

This may be an old story to some companies, but we intend to embark shortly upon a program of "fixed fee installa-

tions" for dealers. The fees have not been established yet but we expect to organize installing teams in our different cities to economically take care of dealer appliance sales. In this way we hope to accomplish two objectives: remove a detail that often stands in the way of dealer sales and at the same time remove any uncertainty concerning gas connection charges. Free gas appliance connections now encourage dealers to install modern gas appliances in their own homes and to have them installed for demonstration on their sales floors.

The company plans to offer dealers a stipulated amount, probably ten dollars, for every old gas range that is turned over to us for demolishing, provided of course that it is replaced by a new gas range. In this manner, we can help the dealer financially and at the same time, remove from our mains many of those poor-performing or cheaply built ranges that make us vulnerable to competition.

The "Action Program" has also raised our thinking in another direction. We are now planning to upgrade our force of retail salesmen. In our largest straight gas territory, we will increase the ratio from one salesman per 3,700 meters to one per 3,000 meters. In one small straight gas city where we have the most competitive situation, we now have one salesman for its 1,300 meters plus its several hundred non-user prospects.

All display stores in gas properties are being thoroughly checked and modernized. We intend to be sure that there is a working kitchen for homemaker and youth cooking classes in each of these locations.

At the same time, we are going to upgrade our customer relations program. For one thing, we want the public to be thoroughly aware of the advantages of our existing policy of free main extensions. We want to make certain that when the customer benefits, the company gets the credit that is due. A colorful booklet is now in preparation that will explain to old and new customers all the various gas services they receive from the company. These points will also be dramatized in newspaper advertisements.

We are still on the eve of complete "automaticity" in gas range sales. It is something that cannot be done overnight or by edict. However, our entire sales management is enthusiastic about the upgrading program. We are plugging hard at our problems and are moving ahead slowly but surely on a broad front.

Facts and Figures

Prepared by A. G. A. Bureau of Statistics

Natural gas sales to industrial consumers by utilities and pipelines during the 12 months ending June 30, 1953 aggregated 29.0 billion therms, with an average price of 2.22 cents per therm. This represents an increase of 12.2 percent over the volume of sales one year earlier, and is equivalent to an advance of 8.2 percent in average cost. The latter percentage reflects not only price increases necessitated by higher field prices and increased operating costs, but is also influenced by the decreasing importance of interruptible and off-peak sales, with their inherently lower unit prices, to the industry as a whole.

Availability and utilization of underground storage reservoirs has permitted some utilities, in appropriate locations, to develop a more profitable method of disposing of excess gas supplies during the summer. The circumstances mentioned above are illustrated in the accompanying table, showing the average cost of natural gas for industrial purposes for each month of 1952 and 1953, together with 1943 averages for comparative purposes. To the extent that some of this gas is used as fuel, where the flexibility, superior flame characteristics and/or chemical composition are not important, these current prices are roughly equivalent to heavy fuel oil at $3\frac{1}{4}$ cents per gallon and bituminous coal at \$5.50 per ton. This calculation omits consideration of efficiency differentials and thus overstates the comparative price of competitive fuels.

Appliance data shown below relate to manufacturers' shipments, and represent operations of the entire industry. These data are compiled by the Gas Appliance Manufacturers Association which will supply more detailed statistics to any utility, upon request. Industrywide electric appliance statistics are based on data compiled by the National Electric

(Continued on page 44)

AVERAGE COST OF NATURAL GAS TO INDUSTRIAL CUSTOMERS OF U. S. UTILITIES AND PIPELINES

	Cents per Therm		
	1943	1952	1953
January	1.86	2.13	2.26
February	1.81	2.14	2.33
March	1.79	2.15	2.34
April	1.77	2.14	2.33
May	1.73	2.15	2.31
June	1.69	2.03	2.23
July	1.70	1.98	2.20
August	1.68	2.03	2.20
September	1.66	2.10	
October	1.70	2.16	
November	1.72	2.19	
December	1.77	2.22	

SALES OF GAS AND ELECTRIC RESIDENTIAL APPLIANCES DURING 1953

(WITH PERCENT CHANGES FROM THE CORRESPONDING PERIOD OF 1952)

RANGES	September		August		January through August	
	Units	Percent Changes	Units	Percent Changes	Total Units	Percent Changes
Gas	201,400	+ 0.9	168,500	— 5.7	1,431,400	+ 4.4
Electric	not available		84,900	— 4.6	977,400	+35.0
WATER HEATERS						
Gas	177,500	+ 3.7	163,500	+ 1.2	1,471,200	+21.8
Electric	not available		58,700	+ 2.8	549,600	+18.9
GAS HEATING						
Furnaces	60,500	+11.2	48,900	— 4.7	313,900	+20.9
Boilers	10,300	+19.8	9,500	+18.8	42,800	+10.9
Conversion Burners	30,400	+ 2.4	27,700	+ 3.7	131,600	— 5.7

PERTINENT BUSINESS INDICATORS, 1953

(WITH PERCENT CHANGES FROM THE CORRESPONDING PERIOD OF 1952)

	September	Percent Change	August	Percent Change
Industrial Activity (1935-39 = 100)	234	+2.6	236	+9.8
Consumer Prices (1947-49 = 100)	115.2	+1.0	115.0	+0.6
Housing Starts, Non-farm (thousands)	92	—8.7	94	—5.1
New Private Construction Expenditures (\$million)	2,185	+7.7	2,205	+8.6
Construction Costs (1947-49 = 100)	not available		135.1	+1.4

*Extensive field tests prove
the practicality of Milwaukee fogger*

Hot-oil fogger for use in underground vaults

By PAUL W. KRAEMER

Manager of Utilization
Minneapolis Gas Company
Minneapolis, Minn.

Minneapolis in 1935 converted from manufactured gas to mixed gas. We then began humidifying with steam and fogging with hot-oil as the gas entered our primary distribution system at about five to 15 pounds per square inch. The great majority of customers are served from the low pressure distribution system of about six inches water column and most of the gas from the primary system is passed through district pressure regulators.

Pressure reduction of fogged gas by means of regulators or pressure reduction valves knocks out most of the oil fog. Therefore, in order to obtain the desired amount of fog in the low pressure system, atomizer type cold oil foggers were installed in district regulator vaults to deliver fog into the low pressure main.

The house heating load increased rapidly each year multiplying the gas load

Additional details of the Minneapolis hot-oil fogger can be obtained by writing to the author.

and increasing the gas velocity. With the growing sendout and growing distribution system, most additional district-regulator installations included cold foggers.

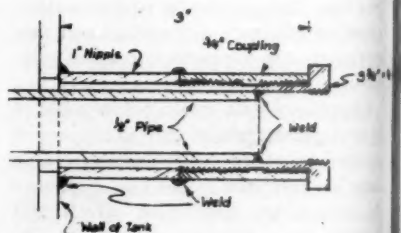
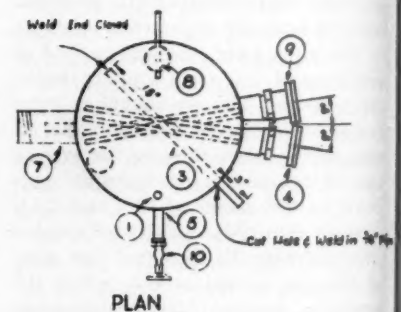
Operating difficulties with cold oil foggers are characterized by a concentration of oil in the distribution system near the fogger and a proportionate lack of oil as the distance from the fogger increases. The result in some instances has been to have excess oil entering the gas services near the fogger and dust flow in the mains and services in areas remote from the fogger. Increasing fogging rates aggravated the excess oil areas. Consequently, during peak load periods in critical areas it was necessary to fog from portable hot-foggers to alleviate the situation. From our experience it became obvious that improved fogging methods were necessary in order to produce a controllable and stable oil fog.

In the latter part of 1947 we began to study oil fogging first with an attempt to improve the cold fogger. After some experimentation it was concluded that to produce oil fog mechanically was not practical in that, at best, the average droplet size was too large for good carrying power in normal gas flows. We then examined the practicability of hot-oil

foggers in regulator vaults. It was reasoned that our present method of hot-oil fogging, bubbling gas through hot oil and then into a centrifuge with sweep gas, could be improved. Use of that method results in a carry over of oil particles from the bubbling, coalescence of particles by the cooling sweep-gas and tortuous piping or turbulence. Thus, there is a depositing in the main gas stream of many oil particles with little carrying stability.

It was theorized that by maintaining a pool of oil at a temperature to produce a sufficient vapor-pressure gas could then be passed over the oil surface at a controlled rate to result in a dilute oil-vapor and gas mixture. If the mixture was at sufficient dilution and heat loss of the mixture were at a minimum, oil could be deposited into the main gas-stream as a true vapor. The immediate great dilution by the relatively large volume of main gas would produce a fog in extremely minute particle sizes for maximum carrying power.

Guided by the fog rate requirements of the fogging oil we have been using for our hot-oil foggers, we sized a fogger of capacity for the sendout of our dis-



CROSS SECTION OF CONNECTIONS
A, B, D & E

strict regulator installations. It was decided that the most practical and safe method of maintaining the desired oil temperature range of 360 F to 380 F in a vault-installed fogger was by means of electric immersion-heating units. By trial we arrived at the fogger design as shown by Figure 1 and an electric wiring and control design as shown by Figure 2.

Operation

The oil-supply tank being mounted higher than the fogger maintains a constant level of oil in the fogger through the connecting vacuum line and oil supply line. Heat traps in those two lines prevents oil circulation or oil build-up in the fogger due to the temperature difference of the supply oil and fogger oil.

Heating of the fogger oil is accomplished with electric immersion-heating units designed for use with non-circulating oil systems. The use of such a low surface-temperature heating unit prevents carbonization of the oil. The temperature sensitive bulb of the limit control inserted in a well in the heated oil maintains the desired constant temperature through the control circuit. Gas from

the high pressure side of the regulator enters the fogger through the vaporizer-tube, and is blown onto the surface of the heated oil. The resultant dilute oil-vapor gas mixture flows directly through the outlet near the top of the fogger tank and into the low-pressure gas stream. In case of the depletion of the oil supply a second temperature sensitive bulb in the well mounted directly beneath the vaporizer tube is exposed and cooled by the gas inlet. This cooling opens the control circuit to shut off the heating elements which then must be turned on manually.

Relationship of the gas supply to the oil sendout may be plotted as shown by Graph "B." By inserting an orifice of known characteristics, a pressure regulator, and a pressure gauge in the gas supply line to the vaporizer tube it is possible to preset the exact oil sendout by adjustment of the regulator pressure. A more elaborate and effective gas supply hook-up will be used on our six installations this year. We will tie the fogger regulator into the loading device of the district regulator in order to vary the oil sendout with the district regulator send-

out. With such proportioning, service problems and drip problems caused by a high oil rate during low sendout periods should be eliminated.

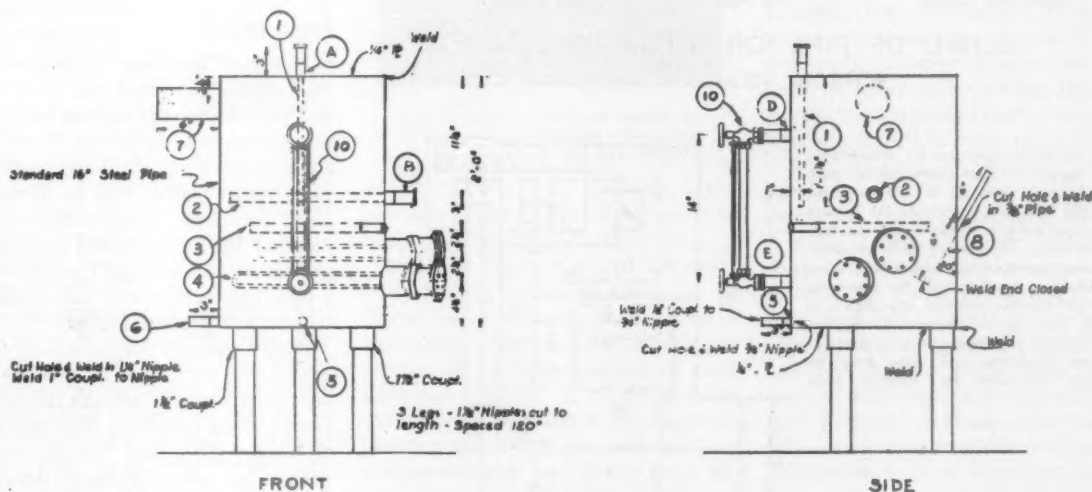
Installation

The fogger installation is similar or identical to any other district regulator fogger installation as far as gas piping or connections are concerned. One exception is that the fogger and the oil fog supply line to the main must be insulated to prevent premature cooling of the vapors or excessive heat loss. We have used and found very satisfactory an insulating layer of three-inch magnesia protected by cloth and a cement wash.

The electric supply may, of course, present a problem in some localities and must be dealt with for each installation.

In order to eliminate the dangers of operating controls or contactors in the possibly explosive atmosphere of a regulator pit and the expense of explosion-proof cases for each electrical unit, it was felt advisable to mount all of the controls outside the vault. By mounting all of the controls in a weather-proof box on a post at the curb, and the use of long capillary

Figure 1—Design of Minneapolis hot-oil fogger electrically heated. Insulation: Cover with 3" corrugated asbestos paper or magnesia; seal ends and joints of paper; leave access to fittings. (1)— $\frac{1}{2}$ " Pipe—Oil Leveler Dip Tube, (2)— $\frac{3}{4}$ " Pipe—Oil Vaporising Gas (Detail Shown), (3)— $\frac{3}{4}$ " Pipe—Well for Thermostat Bulbs, (4)—Electric Immersion Heater Unit, (5)— $\frac{1}{2}$ " Pipe Coupling for Oil Leveler Fill, (6)—1" Pipe Coupling for Oil Drain, (7)—3" Pipe Vapor Outlet to Main, (8)— $\frac{3}{4}$ " Pipe Thermometer Well, (9)—Electric Immersion Heater Unit, (10)—Level Gauge



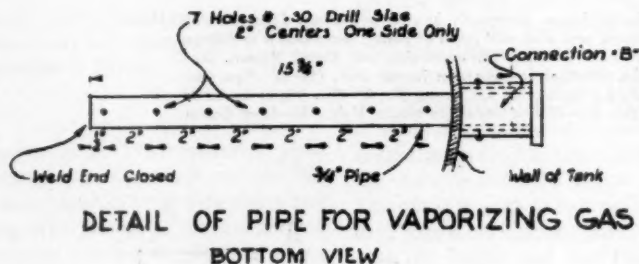
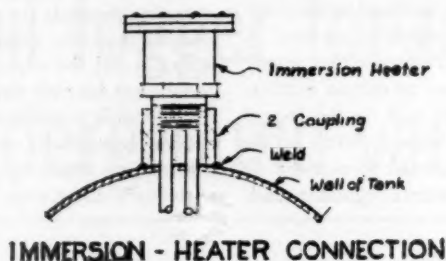
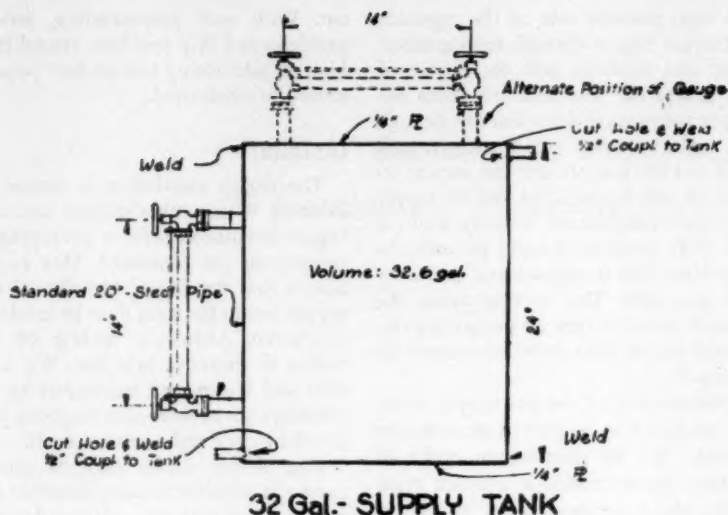


Figure 2—Wiring diagram for Minneapolis hot-oil fogger (1) Momentary contact push button for cold start, (2) D.P.D.T. magnetic relay, (3) Two-pole contactor, (4) Remote bulb temperature controller—close on temperature drop, (5) Remote bulb temperature controller—open on temperature drop, (6) Immersion heating unit for non-circulating oil. Control contacts are shown in position for normal operating heating cycle. Control 5 is open on cold starts or upon oil depletion and relay must be energized manually for heating cycle

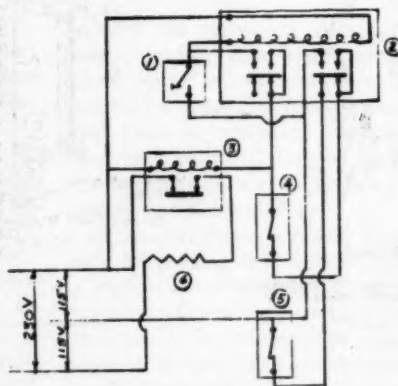


FIGURE 2

WIRING DIAGRAM FOR MINNEAPOLIS HOT-OIL FOGGER

tubes on the heat control bulbs, the only electrical connections to be made in the vault are those to the immersion heaters. The use of explosion-proof heads on the immersion heaters, a stock accessory with several manufacturers, and the fact that there are no electrical contacts to be made or broken in the vault, results in a very safe installation. The fogger has multiple positive grounds through piping and conduit connections, thus there is no danger in the case of a short.

Costs

From the experience gained in constructing and installing the fogger now in operation, it is estimated that the average cost for each fogger should be as follows:

Fogger unit and supply tank	\$125
Controls, heaters, and weather-proof box	175
Fogger installation	100
Electric installation	150

Total Cost \$550

Using performance curves showing power consumption versus fog rate, power requirements can be calculated for any oil sendout. For example, assume a regulator with a sendout of 50,000 cubic feet per hour to be fogged at the rate of one gallon per million. The fogger sendout would then be 0.05 gallon per hour and the power requirement 1.4 kilowatt. At a three cent per kilowatt hour electric rate, this operating cost would be 4.2 cents per hour.

Field tests

A fogger has been in operation in Minneapolis for about two years. The first year the installation was made in a distribution sub-station to allow easy accessibility during the determination of performance curves and to allow for slight construction changes to be made as required. During the second year the fogger replaced a cold fogger installation in a typical street regulator vault feeding a 16-inch low pressure header.

Before the cold fogger was replaced, gas samples were taken at equal rate and volume from the services in several houses along one mile downstream of the fogger and passed through filter paper in a tar-camera. Although not an exacting quantitative analysis, the great amount of oil in the gas near the fogger

(Continued on page 42)

*Inter-departmental teamwork spells
good service for customers of Boston utility*

Service as the salesman sees it

By JOHN J. QUINN

*Vice-President
Boston Consolidated Gas Company
Boston, Mass.*

Use of the term "service" is primarily considered in the sense of what we do for customers so that they can enjoy the full use of the gas equipment they have or are induced to purchase. There is, however, a broader use of that term.

First of all, "service" involves close teamwork between operating and sales departments. Each must aid or serve the other to the end that our customers and prospective customers may recognize the gas company as an outstanding organization to which they are glad to turn for advice in the selection of appliances and heating equipment, as well as for physical service on their equipment whenever this is required. In my opinion, you can't have good service from any viewpoint without first having good internal service between departments.

The importance of good physical service and the need for united action on all fronts by gas companies and equipment manufacturers have been recognized for many years. In fact, recognition of this need was one of the reasons for formation of American Gas Association as well as the New England Gas Association and later the establishment of the A.G.A. Testing Laboratories. This recognition resulted in the development of appliance approval requirements, an industry research program, national advertising, the PAR Plan, the Action Program for Gas In-

dustry Development, and more recently the proposed Public Relations Program for our industry.

Every one of the 15 points in the Action Program requires active interest and joint participation of the operating and sales departments of each gas



John J. Quinn reports that service depends upon cooperation throughout all departments in the gas company

company if this Action Program is to be successfully carried out.

Eight of these 15 points are especially pertinent to this discussion of "Good Service from the Salesmen's Standpoint". The first of these eight points calls for an evaluation of main extension policies. It seems obvious that only by the closest of teamwork between operating and sales can we achieve the goal and justify these extensions by securing "the maximum economic number of new customers".

Every good gas man bemoans the fact that some housing developments, shop-

ping centers, and the like have been established in these postwar years without the benefit of gas service because of the excessive distance from existing gas facilities. Frequently the intervening areas, or those immediately beyond the original project site, are later developed. But because the gas facilities were not extended in the first instance, "the last state is worse than the first" so far as justifying the required investment.

When this unfortunate condition occurs we are restricting our future development as well as limiting our immediate growth. If both sales and operating departments work closely in securing all possible information well in advance of the start of such projects, it has generally been our experience that we can between us find justification for these extensions. Obviously, the final decision to provide the funds for extensions must rest with executive management, but unity of action in assembling the facts on which management can act will go a long way toward securing approval.

Even in situations where no major problem exists in regard to extending mains and installing building supplies, it is still our experience that close teamwork is essential. For instance, all of the work put into the selling of gas equipment for a new home—or a new appliance for an older home or place of business—may be lost through failure to make or arrange for connections to be made promptly, in workmanlike manner, with a minimum of public or customer inconvenience. It is important that all concerned recognize the likely causes of dissatisfaction and take all necessary steps to avoid their occurrence.

Delegation of responsibility is impor-

Based on Mr. Quinn's remarks before the Operation Division of The New England Gas Association in Springfield, Mass., October 15, 1953.

tant if we are to avoid many of the causes of customer dissatisfaction. In our concept, the sales representative should secure all pertinent information to make possible completion of the installation in the most satisfactory manner. The order forms should provide for recording all essential information. On large construction projects, plot plans, specifications, etc. should be secured by the sales representative and turned over to the operating department with detailed memoranda on the what, why and when of the installation. In the case of public improvements—such as new highways—the operating department may secure advance information that should be promptly relayed to the sales department, for such undertakings frequently necessitate the dislocation of present customers or the likely development of new customers.

Another point in the Action Program calls upon the operating department to "distribute gas that is uniform in character and pressures so as to insure satisfactory use of appliances." In recent years this urgent point has not been as simple to achieve as it sounds. For the sales department to damn the operating department for this, or other unavoidable deficiencies in our service, is no help at all. On the other hand, for the operating department to fail to appreciate the importance to sales of uniform quality and supply is unthinkable. Yet, without adequate teamwork and foresightedness on the part of both sales and operating departments any deficiencies in service or planning can seriously aggravate the situation and ultimately limit our growth and prosperity.

It is obviously the responsibility of the operating department to plan well in advance of urgent need for system reinforcements, before customer complaints become chronic and business is lost.

Three other points bear upon appliance servicing:

(1) "To inform customers regarding extent and character of service that the utility is prepared to render"—

In Boston Consolidated Gas Company we have a liberal service policy—one-half hour free on customer's premises. Because of limitations in manpower and facilities, we have until recently done little to publicize this very important asset to acceptance of our appliances and service. A liberal service policy is a most valuable asset to sales—if the public

knows. You know this has been an important reason for sale of house heating even at a premium price.

(2) The gas company is generally the best equipped agency to render gas appliance service—and this service need not necessarily be free. Whether on a free or charge basis, the essential requirement is that it be prompt and competent when required. The less frequent the need for service the better.

In Boston we believe it to be good business to provide, upon customer's request, prompt and efficient appliance adjustment service, with the cost of such service included in operating expenses to a reasonable and practicable extent. We further believe that this service should be rendered to all gas appliances meeting prevailing minimum standards of safety, without distinction as to appliance warranty or point of purchase; provided that, in our judgment, the appliance can be restored to proper operating condition.

This does not imply that we consider ourselves to be the exclusive agency for providing appliance service. On the contrary, we encourage and work with all qualified service agencies and contractors. Where we find improper installations made by others, we either correct such installations at a charge or refer the customer to an appropriate service agency, which is what the Action Program recommends.

Parts-replacement

(3) We subscribe to a further point, and include its practice in our service policy. In the absence of adequate service by other parties, we offer at reasonable charges, parts-replacement service on gas appliances *without distinction* as to *appliance warranty or point of purchase*, provided that the appliance can be restored to proper operating condition. Of course, we look to the appliance manufacturer or his designated representative to supply any needed parts if the equipment is within warranty and we charge manufacturers for our service in certain situations.

Here is an example of what might be considered an unreasonable customer demand that was adjusted to the satisfaction of all concerned, through courtesy, patience, a fair discussion of the facts and good teamwork on the part of operating and sales departments.

A builder had acknowledged that gas for heat was excellent, but complained of delays which he contended usually

accompanied an installation in a new home. He informed the salesman that it took five different men to do the checking and work before he actually received a meter. However, after considerable discussion, he agreed with the salesman to use gas again in 24 houses he planned to build. The salesman did the preliminary work by arranging for a heating contractor, providing a heating layout, providing blueprints of the heating layouts for VA and FHA approval, assisting in a kitchen layout with the installer of the kitchen cabinets, and arranging for proper spacing for the gas range and refrigerator.

The gas service was required in a rush to meet a holiday opening date for the first built "model home". Our foreman responded promptly, but he wanted to bring the service into the cellar just where the game room was to be located. The builder said, "Bring it in at the end of the cellar." The foreman said, "No!" The builder said, "Either bring it in the place I say, or it doesn't go in at all!" The foreman relented and did what the builder wanted. (Only four feet of extra supply pipe was involved.)

Everything then went smoothly until it was time for a meter set for the model home in the development. The meter man arrived on a Friday afternoon and set the meter. But he did not turn on the gas, for a leak had appeared in the piping leading to the regulator (this, incidentally, is the responsibility of the gas company).

On Friday evening at seven, the new building supervisor received a call from the builder to tell him that the meter was placed, but was not turned on, and he needed heat immediately. This request came in the form of an ultimatum: "Either we get the gas on right away, or forget the entire installation!"

A call was made to the night dispatcher, a gas company fitter was sent to the house, the leak was repaired, and heat was turned on at 11 PM. If this had not been accomplished that evening, the builder would more than likely have been lost to the use of gas for years to come. If the foreman had not relented in the location of the service, and if the night dispatcher and the fitter had not cooperated, this sale would have been lost.

This is an illustration of the benefits that occur when operating and sales departments work together.

One further observation on the im-
(Continued on page 42)

Home service fosters local UN

Utility-trade union-school plan increases tolerance among various nationality groups



A UNIQUE community service to foster understanding among several nationality groups is the pride of Fall River, Massachusetts. Now enjoying its second season, this "Know Your Neighbor" program was begun last year as a joint venture by the Fall River Gas Company and a powerful community force, the International Ladies Garment Workers' Union. Although many others have cooperated since its inception, much of the credit for the program's origin and success goes to the utility's home service director, Mrs. Gladys Bramblett.

In the course of her work in the textile mill town, where most of the 100,000 inhabitants are of foreign nationality, Mrs. Bramblett became fascinated with the diverse customs, foods and eating habits. She became convinced that food, her specialty, is a common denominator through which all nationalities can understand each other.

Thus, when the International Ladies Garment Workers' Union asked her to put on a series of cooking classes for its members during the Fall of 1952, Mrs. Bramblett accepted readily. Rather than conduct conventional cooking classes for

the foreign-born, given by scores of metropolitan utilities, Mrs. Bramblett's idea was to feature demonstrators and narrators of foreign background to prepare the foods and explain the cultures of their people. Everyday fare was emphasized.

Adult education leaders in the city schools coordinated their courses in foreign backgrounds and cultures with "Know Your Neighbor" and the program grew into a full-fledged community service, available to the town's entire populace, not only union members.

The local newspaper devoted a great deal of space to publicity and local businessmen cooperated wholeheartedly. No admission was charged and the attendance at each of the five two-hour sessions averaged about 600 persons.

The five featured nationalities during the 1952 season were Lebanese, Polish, Portuguese, Canadian French and Jewish. In addition to the food demonstration, each class had a special feature—color movies, folk dancing, singing and in the case of the Jewish program, an explanation of a religious rite.

The narrators for each class were carefully chosen. For instance, the Lebanese

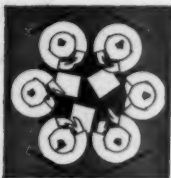
night narrator was a Lebanese-American school teacher who had recently made a tour of the Near East.

The utility contributed towards financial sponsorship, it installed two gas ranges and a gas refrigerator in the meeting hall.

Utility home service and sales employees assisted demonstrators and narrators to formulate programs; they rehearsed classes, retested and mimeographed recipes for distribution and assisted in advance preparation of food. Also, the utility was the focal point for the various phases of the program: sponsorship, narration, demonstration, publicity and advertising.

The current 1953 series features the Italian, English, Chinese and Greek cultures. It is being sponsored by civic and service groups, the town's largest radio station, the utility, the union and the school system.

From Mrs. Bramblett's point of view, "Know Your Neighbor" is the most successful project her department has participated in during her years with the gas company. She reports that the public relations value is tremendous.



Industrial relations round-table

Prepared by
A. G. A. Personnel Committee

Edited by W. T. Simmons

● **Bulletin Boards**—This widely used medium for bringing communications to the attention of employees is reviewed in an interesting manner in an issue by the National Industrial Conference Board, Inc. Ask for "Highlights for the Executive," Studies in Personnel Policy, No. 138.

● **Employee Communications**—Recently, *Industrial Marketing* magazine presented an article discussing the use of matchbook covers as a method of employee communications. The article stated that they seemed to do their best job in the field of safety, "although in New York City, The Consolidated Edison Company uses them to carry factual business information about the Company through its 30,000 employees to the general public." With changes in design every few weeks, the company's matchbooks give figures on expenditures for smoke control, plant expansion, and tax payments. Ray Martin, director of advertising, said that the company now gives out 20,000 matchbooks a month.

● **Wage and Hour—FLSA "Salary Basis" rules are protested by employer group**—The Commerce and Industry Association of New York, Inc., has filed a protest by letter with Administrator William R. McComb of the Labor Department's Wage and Hour Division against the interpretation placed by the Division on the "salary basis" rule affecting pay for exempt executive, administrative, and professional employees under the Fair Labor Standards Act.

Thomas Jefferson Miley, executive vice-president of the association, holds that the rule as now construed "would seriously disrupt traditional compensation practices for such exempt categories of employees."

Citing specific features of the current interpretations, Miley says that, for one thing, "the regulations would operate to cause exempt employees in many cases to earn more money when off sick part of the week than when they work a full week." He says: "It would appear that the clear intent of the act may be defeated in the process of 'defining and delimiting' its provisions."

The present rule governing employees "on a salary basis" requires that to be considered exempt from wage and overtime requirements of FLSA, executive, administrative, and professional employees must be paid a full week's salary for any week in which work is performed. Enforcement of this regulation has been postponed until December 31, 1953.

Presumably, Mr. Miley's protest against the regulations will be followed by others.

Employers must prove employee exemption—Appeal from dismissal in employee's suit for overtime pay. A newspaper employee, in charge of the mechanical department paper, sued to recover overtime pay under the Wage-Hour Law. The newspaper contended that, as mechanical supervisor, he was exempt from the Wage-Hour Law, being an employee who devoted not more than 20 percent of his hours a week to activities outside of "executive capacity." The lower court dismissed the case, holding that the employee had the burden of proving that he had devoted more than 20 percent of his hours a week to non-executive duties and that he failed to sustain this burden of proof. The employee appealed, contending that it was the newspaper's task to prove he had worked not more than 20 percent of his hours at other duties, and not his responsibility to prove he had worked more.

The court held that the employee was correct in this contention, and that it is the employer's duty to prove the exemption he claims. However, the court concluded that the newspaper actually had proved its exemption claim at the trial and affirmed the dismissal of the action. *Pugh v. Lindsay et al.* (USCA-4; 7-11-53), No. 6587, 53 ALC 1029.

● **Employee Magazine and Newspapers**—An interesting review of the format, distribution, content, and cost of company-sponsored magazines and newspapers is observed in a National Industrial Conference Board, Inc. leaflet. Request "Highlights for the Executive," Studies in Personnel Policy, No. 136.

● **NLRB rulings—NLRB will not condone change in ballot form**—Pre-election propaganda by unions usually gets a tolerant eye from the National Labor Relations Board, but when it goes to the extreme of altering a facsimile of the Board's official ballots, NLRB will call a halt.

This is the Board's decision in a case involving Anderson Air Activities, Malden, Missouri, and CIO's United Auto Workers. In this case the Board sustains the employer's charge regarding union conduct affecting the election—in which the Auto Workers won by a vote of 187 to 158—and thereby reverses the NLRB regional director who ruled against objections raised by the employer.

The Board, in ordering a new election at the plant, finds that just before the balloting the Auto Workers distributed a handbill purporting to be a facsimile of the Board's official ballot. The handbill was marked "Sample," but the union had altered the ballot form by substituting words of its own for an NLRB paragraph, the Board says.

The Board's ballots contain a paragraph which states that: "This ballot is to determine

the collective bargaining representative, if any, for the unit in which you are employed. If you spoil this ballot, return it to the Board agent for a new one."

In place of this paragraph, the Board says, the union substituted the following in its "Sample": "For Better Wages, a Consistent Method of Progression, Iron-clad Seniority Rights, Promotions to Better Jobs Based on Seniority, Good Grievance Procedure, Better Health and Safety, and Better Working Conditions in General."

The Board overrules the regional director, stating that he did not give proper weight "to the alteration in the content of what purported to be a sample ballot of the Board," since by this change the union "created the impression that the Board had endorsed its propaganda claims and that the issue in the election was as formulated therein." The Board concludes that: "The Board is jealous of its reputation for the strictest impartiality in the conduct of representation elections. It looks with disfavor upon any attempt to misuse its processes to secure partisan advantage."

"The Board allows broad latitude in carrying on pre-election propaganda. But there are limits to propaganda methods which the Board will permit. The petitioner (union) exceeded those limits in the present case."

"The Board has permitted parties to distribute marked sample ballots in order to show their partisans how to vote at the election. But that permission does not extend to the distribution of falsified ballots under the guise of true copies of official ballots used in elections."

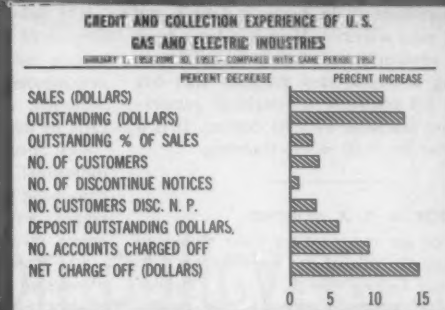
"We find that the distribution of the ballot in question prevented a free and untrammelled expression of choice by employees. Accordingly, we shall, contrary to the regional director's recommendation, set aside the results of the election held on May 14, 1953, and direct a new election." (Case No. 14-RC-2113. Made public August 4, 1953.)

Workers with rating chore are supervisors, NLRB says—Four hundred employees of General Telephone Company of California are ruled out of a 5,000-member unit of CIO's Communications Workers by the National Labor Relations Board, which determines that they are supervisors by Taft Act definition because they have the responsibility of rating subordinates (who may be the same seniority) on a standard work performance form.

CWA contends, however, that the disputed employees in the case are not solely responsible for ratings of workers since a salaried "superior" must sign the work performance forms and in many cases such a supervisor and the one who actually writes up the tally get together on the final rating. In other instances, the Board found, a "composite rating" is necessary because employees may have worked under several foremen in the six-month period rated on the form.

(Continued on page 43)

Customers, sales and deposits rise



• THE CREDIT PICTURE •

● Due to the record number of participating companies, the tenth semi-annual Credit Picture that appears below is the most representative analysis since the start of the project in 1949. All data was gathered, collated and interpreted under supervision of the Credit and Collections Committees of American Gas Association and Edison Electric Institute. The previous six-month survey appeared in the April 1953 issue of the MONTHLY.

A total of 75 utilities, the largest number so far, participated in the Credit

Picture for the first six months of 1953. With one exception, these companies reported a continuation of the increase in sales which has been uninterrupted since the Credit Picture was started in 1948.

For the first time, the Credit picture includes information about the trend in the number of deposits. As shown in the accompanying table and graph, customers increased at somewhat greater ratio than did the number of deposits. The difference, however, is not great enough to have any special meaning. The following items regarding deposits as reported in the questionnaires are worthy of mention:

(1) A medium large utility in the East North Central area has, within the past year, refunded over \$400,000 (one-half of its deposits) to customers who have had a satisfactory paying record for one year. These deposits were acquired in a merger with another utility.

(2) A large utility in the Pacific area has eliminated the requirement of a deposit to secure new domestic accounts.

A comparison by areas shows the percentage of accounts secured by deposits ranges from a low of one percent in the

(Continued on page 42)

(JANUARY 1, 1953-JUNE 30, 1953) • PERCENT INCREASE OR DECREASE OVER CORRESPONDING PERIOD-1952

	NEW ENGLAND	MID ATLANTIC	EAST NORTH CENTRAL	WEST NORTH CENTRAL	SOUTH ATLANTIC	EAST SOUTH CENTRAL	WEST SOUTH CENTRAL	MOUNTAIN STATES	PACIFIC STATES	UNITED STATES TOTAL
SALES (Dollars)										
Total Sales	+ 7.3	+ 7.5	+11.3	+10.6	+ 9.3	+10.8	+11.4	+12.3	+15.4	+10.5
Total Sales (Excl. Ind.)	+ 6.4	+ 7.1	+10.4	+ 8.7	+ 8.7	+11.9	+13.4	+ 9.9	+ 8.3	+ 9.5
OUTSTANDING (Dollars)										
Gen. Led. Bal.	+ 4.1	+ 8.6	+14.7	+14.8	+11.6	+16.6	+15.4	+13.5	+20.9	+12.8
Cycle or Past Due Bal. (Excl. Ind.)	+ 7.0	+ 3.8	+ 1.7	+ 6.1	+14.4	- 3.4	+38.7	+18.1	+ 6.8	+ 7.2
OUTSTANDING-% of SALES										
Gen. Led. Bal. to Total Sales	- 2.9	+ 1.4	+ 2.9	+ 3.8	+ 1.5	+ 5.5	+ 3.8	+ 0.9	+ 5.1	+ 2.6
Cycle or Past Due Balance (Excl. Past Due Ind.) to Total Sales (Excl. Ind.)	0	- 4.4	- 9.7	- 2.5	+ 6.0	+N.A.	+25.0	+ 7.5	+N.A.	+ 2.7
NUMBER OF CUSTOMERS	+ 1.8	+ 1.4	+ 2.7	+ 3.7	+ 5.9	+ 5.4	+ 4.1	+ 6.5	+ 4.8	+ 3.4
NO. DISCONTINUE NOTICES	+ 4.2	- 2.4	+ 3.1	- 1.7	+ 9.7	- 9.1	+14.7	+30.4	+ 7.0	+ 1.0
NO. CUSTOMERS DISCON. N. P.	+14.4	- 6.5	- 4.7	+ 8.0	+20.5	+ 3.5	+ 8.5	+20.9	+19.4	+ 3.1
DEPOSITS OUTSTANDING (\$)										
Number	- 4.9	+ 7.5	a	+11.0	- 1.6	- 9.4	+18.8	+ 4.5	-26.4	+ 2.6
Amount (Dollars)	+ 1.0	+ 7.3	- 7.8	+ 6.2	+11.4	+ 4.4	+ 5.0	+ 2.2	+ 7.3	+ 5.9
NO. ACCOUNTS CHARGED OFF	+11.9	+ 4.8	+ 4.3	+ 3.3	+15.9	+36.9	- 6.6	+33.8	+14.1	+ 9.2
NET CHARGE OFF (Dollars)										
Incl. Ind.	- 6.3	+10.6	+ 8.7	+ 5.6	+21.5	+28.3	+ 0.8	+25.9	+28.7	+14.6
Excl. Ind.	+13.0	- 1.3	- 9.1	+26.4	+20.4	+30.3	-13.7	+41.3	+20.7	+ 9.2

(a) less than 0.05

Southern California Gas reveals dealer relations creed

● The attitude of the dealer is a weak spot in many sales activities. Here is a letter from a sales promotion executive in California outlining a step-by-step program that has enabled his company to establish remarkably close relations with its dealers. It is a long letter but well worth studying.

TO: EDITOR, A. G. A. MONTHLY

How to get the most for your money in promoting the sale of gas appliances?

It is our feeling that A. G. A.'s "Pattern for Profits" program offers us the opportunity to reiterate to our dealer organization the objectives and methods by which we hope to attain these objectives to sell better quality and more gas appliances. We believe that the A. G. A. program offers every utility, no matter what size, an opportunity to encourage dealers to sell modern gas appliances over any of the other items dealers carry.

Our company has a sales division as small as 10,000 meters and a division with as many as 120,000 meters. In these divisions, we have trained manpower whose sole responsibility is to maintain, contact and work with our dealer organization on the following basis.

The gas company will—

(1) **Advertising:** promote the sale of gas appliances by advertising in newspapers and magazines, on billboards, and by participation in gas industry regional and national advertising programs.

(2) **Appliance Displays:** maintain displays of representative gas appliances on its major office floors, and promote displays at important expositions, fairs, shows and exhibits.

(3) **Sales Information:** keep dealers informed of its sales policies, expansions of service into new areas, and advised of new developments in gas appliances by means of bulletins, "Dealer News," and personal calls by dealer representatives.

(4) **Special Merchandising:** develop with individual dealers special appliance merchandising programs for the promotion of gas ranges, water heaters, refrigerators, clothes dryers, incinerators and home heating.

(5) **Prospect Plan:** encourage all employees to participate in the company's appliance prospect plan, and distribute the names of prospective purchasers of gas appliances to dealers in proportion to the emphasis the dealer places on gas appliances in his sales operations, and the extent to which he cooperates in over-all gas promotional activities.

(6) **Sales for Dealers:** offer contracts covering the sale of gas appliances made by company sales contact personnel to dealers, in proportion to the emphasis the dealer places on gas appliances in his sales operations, and the extent to which he cooperates in over-all gas promotional activities.

(7) **Sales Meetings:** conduct sales meetings for dealers and their salesmen to improve sales presentations and sales demonstration techniques.

(8) **Sales Clinics:** conduct merchandising clinics for dealers designed to assist them in handling gas appliance merchandising problems.

(9) **Advertising Help:** offer dealers our assistance in the planning and execution of their advertising in newspapers and other media.

(10) **Promotion Materials:** provide dealers with sales promotion material such as

banners, truck and counter cards, display cut-outs, and other promotional material at minimum costs.

(11) **Publicity Help:** assist dealers with local publicity during appliance campaigns and special promotional events.

(12) **Home Service Calls:** make home service calls on purchasers of gas appliances at the request of the dealer or his customer.

(13) **Service Training:** offer training to the dealer and his installers on the proper installation, adjustment and servicing of gas appliances.

(14) **Kitchen Planning:** offer dealers kitchen planning advice for his customers who are building new homes or remodeling existing kitchens.

(15) **Cooking Schools:** furnish promotional assistance to dealers by organizing, preparing and conducting newspaper cooking schools.

(16) **National Campaigns:** coordinate local participation in industrywide campaigns to stimulate gas appliance sales.

(17) **Floor Traffic:** assist in promoting dealer floor traffic with cooking schools and gas appliance demonstrations in dealers' stores and in women's clubs and similar organizations.

(18) **Direct Mail:** furnish dealers with mailing lists and assist in developing direct mail programs.

(19) **Window Displays:** assist dealers in planning and installing effective window and floor displays.

(20) **Sales Training:** furnish practical, effective on-the-job sales training for dealers' sales people, servicemen, journeymen, installers and store personnel.

(21) **Sales Building:** stimulate dealer appliance sales by explaining the advantages of modern, automatic gas appliances to architects, builders, owners of new homes, and occupants of existing homes, through personal contacts by company sales promotion representatives.

Success story of gas cookery filmed for TV



Kit Davis, home service representative for Southern Counties Gas Co., Los Angeles, conducts cooking demonstrations before TV cameras as part of "Success Story" program featuring operations of Southern California and Southern Counties Gas Companies. Viewers also learned about the utilities' customer service, meter shop and stores functions

Note that many of the foregoing items are shown in the A. G. A. umbrella program, but our program does localize promotional activity to the markets which we serve. Appliance dealers are going to sell something, so why not activate dealer contacts with those outlets merchandising major white goods appliances. By doing this, we find the dealer's effort is focused on selling gas appliances, and not TV, radios, mixers, etc.

The Gas Industry Development Program prompts us all to review present activities and plan for future sales drives. Only we in the utility end of the business are in a position to coordinate programs and show merchandising leadership in serving our territories.

Let's go to work "Today, Not Tomorrow!"

Sincerely,

W. Q. KRINGLE
Supervisor, Dealer Sales and Promotion
Southern California Gas Company

*Policy of the Internal Revenue Service
presented as a guide for public utility accountants*

Taxes and depreciation policy

By R. C. STAEBNER

*Chief, Engineering and Valuation
Branch, Internal Revenue Service
Washington, D. C.*

● After graduation from Harvard, Mr. Staebner was in industrial work from 1912 until 1926 when he joined the Bureau of Internal Revenue. In the bureau, he specialized in valuation and depreciation problems of taxpayers generally, and of utilities primarily. Starting in 1930, he devoted his entire time to public utilities, and from 1935 to 1952 was chief of the bureau's Public Utilities Section. In 1952, he was advanced to chief, Engineering and Valuation Branch of the Internal Revenue Service, which has jurisdiction over valuation and depreciation matters of all types of industry.

For at least the past two decades depreciation has been considered and studied by the management of practically every business in the country. I am sure all of you are familiar with the many facets of the problem and that no discussion of elementary depreciation principles is necessary or appropriate here. However, a brief statement of the history of depreciation for income tax purposes as found in the Internal Revenue Code and Regulations may not be out of place.

Section 2G(b) of the act of October 3, 1913 provided for "a reasonable allowance for depreciation by use, wear and tear of property, if any".

The Revenue Act of 1918, Sec. 234-(a)(7), provided for the deduction of "a reasonable allowance for the exhaus-

tion, wear and tear of property used in the trade or business, including a reasonable allowance for obsolescence", and this clause has been in every subsequent revenue act.

Article 165 of Reg. 45 (1918 Act) states as follows:

"Method of computing depreciation allowance.—The capital sum to be replaced should be charged off over the useful life of the property either in equal annual installments or in accordance with any other recognized trade practice, such as an apportionment of the capital sum over units of production. Whatever plan or method of apportionment is adopted must be reasonable and should be described in the return."

Article 165 of Regulations 62 (1921 Act), Regulations 65 (1924 Act), Regulations 69 (1926 Act) and Article 205 of Regulations 74 and 77 (1928 and 1932 Acts) strike out the words "and should be described in the return" and add the following "and must have due regard to operating conditions during the taxable period. While the burden of proof must rest upon the taxpayer to sustain the deduction taken by him, such deductions must not be disallowed unless shown by clear and convincing evidence to be unreasonable. The reasonableness of any claim for depreciation shall be determined upon the conditions known to exist at the end of the period for which the return is made".

Article 23(1)-5 of Regulations 86 (1934 Act) contains the first, second, and fourth sentences of Article 165 of prior regulations, but states explicitly that "The burden of proof will rest upon the taxpayer to sustain the deduction claimed" and adds some more clauses to conform the regulations to T.D. 4422,

approved February 28, 1934, which amended all prior regulations as far back as Regulations 62. Article 23(1)-5 has stood unchanged through all subsequent regulations.

There are, of course, other articles in the regulations with respect to depreciation, but the method of determining the depreciation deduction is, as I understand it, the essential question you are presently interested in. You will note that from the 1918 Act onward the regulations in this respect have provided essentially as follows:

(1) That the basis of the asset shall be charged off over the useful life of the property.

(2) That the straight line method is not mandatory but if it is not used, a "recognized trade practice" is required.

(3) That the method of apportionment must be reasonable.

(4) Beginning with the 1921 regulations a fourth condition is added: the reasonableness of a depreciation deduction is to be tested by the facts known at the end of the taxable year.

From 1921 until 1934, although the strictly legal burden of proof rested upon the taxpayer to sustain the deduction claimed, the regulations held that the depreciation claimed in the return was not to be disallowed unless shown by clear and convincing evidence to be unreasonable. However, T.D. 4422 retroactively revised the regulations back through 1921 and placed the burden of proof upon the taxpayer to affirmatively sustain the deductions claimed. It provided that he must furnish "full and complete information with respect to the cost or other basis of the depreciable assets, their age, condition, and remaining useful life," etc., and, furthermore, eliminated

Presented before the Taxation Accounting Committees of American Gas Association and Edison Electric Institute in Washington, D. C., October 1, 1953.

the provision that depreciation claimed shall not be disallowed unless shown by clear and convincing evidence to be unreasonable.

So far as this writer knows, the validity of the four essential principles stated above has never been questioned by a court, in fact, they have not often been challenged. Decisions in point are somewhat difficult to find. In the *Wier Long Leaf Lumber Co.* case (9 TC 990) the Tax Court said, in part, "It has long been the rule that depreciation deductions are to be corrected in any year when it is apparent that the factor involving the extent of useful life is erroneous . . . and that the reasonableness of a deduction for depreciation is to be determined upon conditions known to exist at the end of the period for which the return is made."

You are all conversant with the depreciation determinations which have been made in your own cases over the past 20 years under the authority of these provisions. Certainly more than 90 percent of the depreciation adjustments in public utility cases have been agreed to by the taxpayers concerned, and have been based on a careful consideration of the available evidence, both historical and prospective.

Useful life determinations have been based primarily on generally accepted methods of historical analysis, such as turnover studies, mortality curves, asymptotic calculations, etc., to the full extent of the available information. These studies, however, were never accepted as final answers and were modified to the extent necessary by consideration of reserve ratios, growth rates, accounting practices, and forecasts of probable future eventualities. The objective has always been to conform the useful lives and the depreciation deduction to each taxpayer's actual experience, accounting practice, maintenance policies, and the physical and economic conditions under which he operates. At the same time, it has been necessary to conform to the Internal Revenue Code and the Regulations issued thereunder, as interpreted by the Internal Revenue Service, and the courts.

On May 11, 1953 there were issued two important statements of depreciation policy, IR-Mimeograph No. 183 and IR-Circular No. 144. These were published as Revenue Rulings 90 and 91, respectively, in Internal Revenue Bulletin No. 11, May 25, 1953. They set forth present depreciation policy:

Rev. Rul. 90—Policy with respect to depreciation adjustments—

(1) The internal revenue laws allow as a deduction in computing net income a reasonable allowance for depreciation of property used in trade or business or of property held for the production of income. The purpose of the deduction is to permit taxpayers to recover through annual deductions the cost (or other basis permitted by law) of the property over the useful life of the property. The determination of the amount of the deduction is largely a matter about which there may be reasonable differences of informed judgment, but the impact on the revenues resulting from these differences may be negligible one way or the other over the years involved.

(2) Accordingly, effective May 12, 1953, and as respects all open years for which agreement as to the tax liability has not been reached at any level within the Internal Revenue Service as of that date, it shall be the policy of the service generally not to disturb depreciation deductions, and revenue employees shall propose adjustments in the depreciation deduction only where there is a clear and convincing basis for a change. This policy shall be applied to give effect to its principal purpose of reducing controversies with respect to depreciation.

Rev. Rul. 91—Instructions relating to policy with respect to depreciation adjustments—

(1) The purpose of this Revenue Ruling is to furnish guidance with respect to the application of Revenue Ruling 90, which sets forth the policy with respect to depreciation adjustments.

(2) Among the factors which should be given careful consideration in order to give full force and effect to the announced policy are the following:

(a) whether depreciation rates used by the taxpayer are fair and reasonable under the circumstances;

(b) whether the taxpayer has followed a consistent practice in arriving at the amount of depreciation deductions;

(c) whether in considering all factors, including reasonable tolerances, any adjustments proposed are substantial.

(3) in the establishment of the depreciation rates for a taxpayer, careful consideration shall be given to facts and arguments presented by the taxpayer with respect to obsolescence, as well as to the repair and maintenance policy of the taxpayer.

. (Procedural matter omitted).

In further explanation of the policy, the Commissioner of Internal Revenue himself has made various public statements, perhaps the most significant of which is as follows:

"The position I have taken on depreciation, with the group that we have studying it, is that once the depreciation on a particular category or type of property is established and the taxpayer and the Revenue Service agree to it as proper, it should not be changed after that point unless the one who wants to change it takes the burden of proof that the original determination was wrong or no longer applies.

"What I am trying to do is get a reasonable policy, save annoyance to everybody and have a rule under which, once a determination is made, there it is going to stay until the government proves it ought to be lower or the taxpayer proves it ought to be higher." (From *U. S. News & World Report*—May 8, 1953.)

It is obvious that of necessity certain of the phraseology in these documents and statements—e.g., "clear and convincing basis", "fair and reasonable", "reasonable tolerances", "substantial adjustments", etc., are relative terms. But there is no way of laying down precise instructions that will cover the almost infinite variations of facts and circumstances that may arise in several million income tax cases. Nevertheless, the objective of these policy statements is clear; the avoidance of controversy, of frequent and inconsequential adjustments, and the application of a considerable tolerance in the limits to be applied to the words "reasonable depreciation". Furthermore, it may be seen that the burden of substantiating an adjustment to depreciation rates previously agreed upon falls on the party proposing the change.

Perhaps the most difficult problem confronting the rank and file of the Internal Revenue Service in the administration of this policy will be the decision as to what facts and circumstances constitute a "clear and convincing basis" for an adjustment to depreciation. However, long experience with the management and tax representatives of the public utilities has established beyond question that they are a conscientious and reasonable group of men, desirous of getting at the right answer in income tax cases. I am sure that the spirit of cooperation that you have always evidenced in your dealings with the Internal Revenue Service will continue.

Sound selling creates Sound customer relations

By E. H. EACKER

President-Elect, American Gas Association, and President Boston Consolidated Gas Company

Sales and good customer relations are foundation stones of any industry. They are what the gas industry needs most today and will need most in the future. We are now engaged in a great Gas Industry Development Program. Key-noting that program is a challenging plan of action, the prime aim of which is to develop adequate gas appliance sales volume.

Some commercial and industrial gas men may feel that this program is weighted too heavily on the side of domestic gas sales. Admittedly, the factual information which resulted in the Gas Industry Development Program concerned mainly domestic gas appliances. But I assure you that in no way, shape or manner does that evidence lack of regard or interest in commercial and industrial gas sales.

If you will study the 15 points of the Gas Industry Development Program you will find direct reference to home sales or domestic appliances in just one of them. And if in that one the word "establishment" were substituted for the word "home" every one of the points would be as applicable to our commercial and industrial business as it is to our domestic gas business. The A. G. A. board of directors definitely included commercial with domestic in the GID Program but left industrial for later consideration.

Let's review the facts regarding the commercial and industrial gas portion of our business. According to data taken from A. G. A.'s *Gas Facts* for 1952, industrial and commercial establishments comprised 6.9 percent of the customers of the gas industry in 1932 and 7.6 percent in 1952. During this twenty-year period they have grown in number slightly faster than the industry's customers as a whole, yet they still remain only a small minority. Only one customer in 14 is classified as either commercial or industrial.

These customers of yours, however, are much more important to the gas industry than their numbers indicate. From 1932 to 1952 they:

(1) Accounted for a majority of the industry's therm sales, growing from 55 percent of the 1932 total to 63 percent of the 1952 total;

(2) Increased their gas consumption to 5.7 times the 1932 volume. The physical volume of industrial production as determined from the Federal Reserve Board index was 3.8 times as great in 1952 as 1932, and 1952 gas sales to residential customers were 3.7 times the 1932 volume;

(3) Played a growing part in the total gas revenues: 25 percent in 1932; 39 percent in 1952;

(4) Supplied 45 percent of the \$1,744,000,000 increase in the industry's annual gas revenues;

(5) More than tripled their per customer gas load compared to a 125 percent increase in gas sales per residential customer. In 1952 it took 23 average residential customers, using 727 therms per year, to equal one average industrial and commercial customer using

16,685 therms per year;

(6) Almost tripled their per customer contribution to the industry's gas revenue, compared to a 65.7 percent increase in gas revenue per residential customer. In 1952 the average annual gas revenue of \$487 per industrial and commercial customer was eight times the average of \$61 per residential customer.

Do not think for one minute that the importance of our commercial and industrial sales is or will be neglected in this new industry plan for action.

Our customers do not buy our product to satisfy any one of the human senses. They buy it to satisfy a required service obtained through the use of some form of equipment. It is because of this that domestic sales techniques differ from your commercial and industrial sales techniques. Yours is a factual, engineering approach.

The business man is interested in equipment that will help him make more profit through speed, cleanliness, low investment, low operating and maintenance costs. He wants flexible, reliable equipment that will give him uniform production and a better product. Some of the selling points used for domestic appliances may also be used, of course, to supplement the factual industrial and commercial sales approach.

Our modern industrial and commercial equipment is certainly attractive in appearance, well constructed, and has functional beauty. It can also be sold on the appeal of pride of ownership, plus comfort and convenience factors. We know that it will usually cost less to buy and operate commercial gas cooking equipment, but often we place too much

Abridged version of paper presented at Industrial and Commercial Gas Section luncheon during the 1953 A. G. A. Annual Convention in St. Louis.

Dietetic show features combined gas exhibit



A. G. A., PCGA, Southern Counties Gas Company and Southern California Gas Company cooperated with 15 manufacturers to exhibit commercial cooking equipment at annual convention of American Dietetic Association

emphasis on those advantages. Sound selling requires that we present *all* the advantages of our service and equipment. If we can't sell the performance of our fuel and equipment, the cost will not enter into our customer's decision. We can never be too confident of any economic advantage; our competitors will discount any price advantage they may suffer to play up their claimed advantages.

It is this type of approach that gives you unusual opportunity to create and maintain sound customer relations.

You in commercial and industrial sales work have the opportunities for close and friendly relationships with the customer to whom you are responsible. You should know their requirements intimately so that you can present to them valuable information on gas equipment and the use of gas to improve their product or reduce their costs, or both. Our customers look to you for help as sales and engineering representatives of respected companies. To this end, your section's schools have given intensive instruction in the past seven years to over seven hundred commercial and industrial gas men. Certainly successful selling is based on knowledge. The knowledge of all kinds of products, processes, equipment and selling acquired at these schools has helped to amplify sales training given by individual gas companies.

While present business seems to indicate that a trend to gas is continuing for industrial and commercial heat processes, we know we also have aggressive competition. Competitive installations often are

"sold" by subsidizing not only the installation cost but the equipment as well. Then the installation is widely publicized without, of course, disclosing the basis on which it was made. This is not sound selling. The customer in due time finds out how badly he was "sold" (as has happened in my own territory), the equipment is thrown out and those responsible for such a "sale" lose financially and morally.

All of this points up the necessity for constantly presenting the story of the superiority of gas. Thus our national program is geared to presenting the factual story of the services rendered by gas and gas equipment, and to helping you in your sales and customer relations work.

Building prestige

Our industry's PAR Plan is helping materially to combat competition. Through PAR you now get your national advertising program, which has grown from a small beginning as the first national advertising of our Association to a real factor in laying the groundwork for expanding and retaining our industrial and commercial loads. The use of case history and saturation-type advertisements of installations of prominent customers in all kinds of industries, hotels and restaurants, builds prestige for gas.

Research on industrial and commercial projects under the PAR Plan has, and will continue to devise better industrial and commercial gas equipment and better ways of applying heat to the problems

of modern industry.

Sales promotion, most needed in the commercial field, has been emphasized by the Commercial Cooking Bureau of the A. G. A. Promotion Department, along with your section's sales committees, by providing promotional materials of all kinds. These include, of course, promotional literature, planned stage demonstrations, and national campaigns such as the current PEP Commercial Gas Sales Campaign. Also, deserving specific mention is that little publication, *Flame Facts*, which is doing such a good job telling dealers that gas and gas equipment are "tops" for commercial cooking.

Your section and the commercial and industrial departments of gas companies have long realized the importance of dealers in building a sound selling program. Better than nine out of ten commercial or industrial gas equipment sales are made by dealers. This in no way lessens the need for utility commercial and industrial gas sales personnel.

Dean Mitchell in an address entitled "This I Believe," which he presented last month at the Pacific Coast Gas Association, said:

"The weak spot in most sales activities can be found in the attitude of the dealer. It is elemental and axiomatic to say that the dealer is not interested in the type of fuel the appliance uses. He is interested primarily in only three things: (a) a quick sale; (b) profit on the sale; (c) no trouble about it afterward; and, to some degree, customer long-range satisfaction."

You have the responsibility to work closely with the dealer and with manufacturers' representatives. The fortunes of the gas utility industry, the gas equipment manufacturers and dealers of gas equipment are dependent on each other. It is mutually advantageous that they coordinate their knowledge and activities. Your intimate knowledge of your customers' problems can suggest solutions which with the help of the dealer and manufacturers representative will give the customer the kind of installation that will render the service desired. Installations properly designed for your customers' requirements cannot help but be builders of good customer relations.

Sound selling does not stop with the sale of a piece of equipment. As I said earlier, our customers buy our product not for the product itself but for the results obtained with it. They want those

(Continued on page 47)

What rights should the gas storage operator acquire and how can they be secured?

Underground gas storage rights

By CHARLES W. STUDDT

Vice-President in Charge of Production, Union Gas System, Inc. Independence, Kansas

The ownership of certain rights in the reservoir area is necessary to the development and use of an underground gas storage reservoir. This article is written for the purpose of indicating the rights which should be acquired by an operator seeking to establish such a reservoir, and the methods used in current practice in various parts of the country in securing them. Legal forms unique to underground gas storage used in the process are mentioned, but no recommendations are made as to choice of method or of forms. This is left to individual preference which may be influenced by state laws, established custom in a particular region, financial or other factors.

Satisfactory control of an underground gas storage reservoir (the right to its effective use) requires at least limited control of all of the land in the reservoir area. It also requires provision for surrounding border protection, for a sufficient distance beyond the lateral limits of the pool in which gas is to be stored to assure complete protection against the possibility of predatory operations of others. It further requires, to be practicable, the exclusive control of the oil and gas underlying the surface of all such land, contained within the prospective storage zone or porous and permeable portion of the underground reservoir rock in which gas is to be stored.

Presented before Operating Section at 1953 A. G. A. Annual Convention in St. Louis, October 26-28, 1953.

Ability to use a single storage zone may in case of necessity be sufficient, but complete control of the reservoir area is much to be preferred.

That which is primarily sought is the more or less unrestricted right to store gas underground and remove it. To accomplish this, simply stated, one must control the underground container, have access to it, and the exclusive right to use it; also the oil and gas contents of the container, if such substances be present in it, either by ownership of such substances or the exclusive right to reduce them to possession, appropriate, remove and dispose of them.

In underground gas storage the container is a reservoir rock, which in the more inclusive sense in which the term is here used, consists of a single stratum, or a succession of strata comprising a single stratigraphic interval. It includes: (1) a storage zone and (2) so much of the overlying and underlying practically impervious rock as is necessary to confine gas within such zone.

Two types

Satisfactory control is accomplished by the acquisition by legal means and in recordable form of certain rights which, in a broader sense and for the purposes of this discussion, are generally referred to in the aggregate as gas storage rights. Such rights consist of two types: namely, land rights and oil and gas rights. Land rights, as the term is used here, refer to the possession and use of the land as a natural facility. Oil and gas rights refer to ownership in place with appropriate right of removal, or simply the right to produce and market such substances.

From an operating viewpoint, where oil or gas is present in a gas storage zone, two processes are involved. These are gas storage proper and production, separate in a literal sense, but at least insofar as gas is concerned, intimately associated and practically inseparable.

Land rights required consist primarily of the exclusive right to enter upon and to use the land for the purpose of conducting thereon operations for the storage of gas underground, including the use of both the surface and subsurface to the extent necessary or convenient to the operator for such purpose. They include the right of ingress, egress and regress, and the exclusive right to construct pipelines and compressors, drill and equip wells, use, plug, replug or recomplete old wells, install gas cleaning, dehydrating, regulating and measuring equipment and other necessary equipment and structures. They include the right to maintain, operate and use all such facilities at will, for the purpose of transporting, injecting, storing underground, and removing gas of any kind regardless of source or origin, producing and transporting native gas contained in any zone utilized as a gas storage reservoir, and marketing all such gas.

Pipelines to be provided for include trunk and connecting lines as well as field systems of mains and laterals used in input and withdrawal operations. Wells include those used for pressure observation in addition to those used for the primary purpose of gas input and withdrawal. Such rights pertain principally to gas storage operations proper.

Other land rights required permit the construction, maintenance and use of

roads, telephone and telegraph lines, radio stations, power plants and lines, water supply ponds, wells, pump stations, and pipelines for water transmission, and structures for the housing and boarding of employees, the right to use water from ponds constructed and wells drilled by the operator, the right to replace or remove at any time any and all equipment and other property placed on or in the land. In case of a lease, include the right to protect the title to the land against any claims or encumbrances which may adversely affect the interest of the lessee, and the right to assign or to surrender the lease, with appropriate termination in the latter case of the obligations thereunder of the lessee, successors, or assigns, as well as other rights normal to leasehold estates.

Subsurface control

Most of the operations mentioned involve use of only the surface or near-surface portion of the land. Storage of gas underground, however, also implies and requires a substantial control and use of the subsurface, particularly of an underground reservoir rock containing a storage zone capable of receiving, holding and giving up gas when voluntarily withdrawn by the operator. It also implies and requires drilling access to such zone, the right to use it repeatedly at will for input, storage and withdrawal of gas.

It may be desirable and practical to use more than one storage zone in some reservoir areas. It is accordingly preferable that the operator should have the exclusive right to use of the entire subsurface or any part of it which he may choose. This is not possible in some cases. If control can be secured of only a limited portion of the subsurface, if at all feasible, it should cover the entire subsurface to and through the reservoir rock containing the storage zone to be utilized.

In the event only a specific reservoir rock may be controlled, the companion right to drill wells from the surface through all overlying formations and into the porous and permeable zone which it contains, and the right to equip, maintain and use such wells, must naturally also be included. While such limited control of subsurface permits the successful storage of gas, it should be considered the minimum control permissible.

Oil and gas rights required include the absolute or qualified ownership of

all oil and gas in place in the storage zone, or which may be recovered therefrom, within the reservoir area, with the appropriate right of removal, or the exclusive right to explore and drill for, produce, remove and market these substances from such zone. This, again, is a minimum requirement. Such rights should preferably extend to and include all oil and gas within the land or which may be produced therefrom.

For production operations, certain additional land rights are required, which may be generally described as the right to use the surface and subsurface of the land to the extent necessary or convenient to the operator to reduce to possession and market the oil and gas. Such rights, in addition to those already mentioned, are set out in detail in oil and gas lease forms which have become more or less standardized by usage in each of the several oil producing states. However, owing to differences in state laws, no single form may be universally used without alteration.

In one sense, oil and gas are a part of the land. In another sense they are not, but are fugacious substances contained within the land, which, unlike coal and other solid minerals, may migrate or be removed without altering the fundamental structure and body of the land itself, and which could presumably be replaced in the land by like substances. Such replacement is actually accomplished in underground gas storage.

Owing to their fugacious character, the nature of ownership of oil and gas is a subject of some confusion. Some states recognize that the owner of the entire fee-simple title to land has absolute ownership of the oil and gas in place, in and under such land, and can sever and convey such ownership to others as a separate corporeal estate by grant in the same manner as that in which real property titles are transferred.

Other states, and these are in the majority, recognize not absolute, but only a qualified ownership in some form or another, capable of conveyance, and generally amounting to a property interest in the oil and gas so long and only so long as such substances remain in place in the land, and absolute ownership when and if they are reduced to possession.

In still other, the so-called "nonownership" states, it is held that the fee-simple title owner has no actual title to the oil and gas underlying the surface of his land, but only the exclusive right to search for and produce such substances

from the land, ownership of which does not vest in him unless and until he reduces the oil and gas to possession at the surface, when his ownership likewise becomes absolute. This privilege may be transferred by such owner to another by grant of an incorporeal right; namely, the right to use the land to the extent necessary for the purpose of exploring and drilling for, producing, removing and marketing all such oil and gas as may be found.¹ Thus while the legal concept of ownership in the various states differs, in each instance, the oil and gas interest of the owner of the fee-simple estate is capable of conveyance apart from the ownership of the land.

It is assumed that the operator contemplating gas storage development is fully familiar with the laws with respect to oil and gas ownership of the particular state in which such development is to be undertaken. He therefore should be in a position to secure by proper means the required rights to accomplish control of such substances.

Complete control of the prospective gas storage reservoir area, as previously indicated, affords the most satisfactory control and should be obtained in all cases where possible. Such control does not necessarily imply ownership of fee-simple title to the land, desirable as that may be, but does require exclusive ownership of the necessary rights in the land to permit its use for gas storage operations, and exclusive control of all oil and gas within the reservoir area, not only in the storage zone, but in all strata in which they may be found within the land.

Eliminates complications

Such complete control eliminates the complications arising from conflicting oil and gas operations by others within such area, particularly the prospecting and drilling for oil and gas found in strata lying below the storage zone, with attendant danger of loss of stored gas as wells are drilled through it. In such operations, improper cementing of casing through the storage zone may result in underground loss by escape of gas from storage to other strata. Unless the latter are controlled by the storage operator, permanent loss may result. If oil and gas operations within the reservoir area are conducted by the storage

¹ S. H. Glassmire: *Law of Oil and Gas Leases and Royalties* (1938) 98-134.

Old railroad tunnel being converted for propane gas storage

WORK IS PROGRESSING on the Bottle Gas Corporation of Virginia's unique undertaking to convert an abandoned railroad tunnel into a storage place for liquid propane gas. The project began early in the summer, after the Chesapeake and Ohio Railroad gave permission to the Charlottesville

gas company to take over the old tunnel.

Initial preparation of the tunnel for gas storage included sandblasting the walls to clean off nearly a century's accumulation of soot. The tunnel was opened to regular traffic in 1858 and closed in 1944. The storage

section will occupy 1,630 feet of the 4,200-foot tunnel. It will be set off by two bulkheads at the east and west mouths of the tunnel.

More than 3,000,000 gallons of propane will be stored in the tunnel if the project is successful.

operator, to the complete exclusion of others, greater assurance may be had of proper and orderly development and conservation of stored gas.

Such complete control, incidentally, also precludes the exploitation by others of any oil or gas which may be discovered in the reservoir area by storage operator.

Methods and factors

In current practice two methods of acquiring gas storage rights are in common use. That most generally used is by means of a combination oil and gas and gas storage lease or by gas storage agreement supplementing an existing or simultaneously acquired oil and gas lease. The other method is by means of a so-called gas storage deed. As an alternative, the land may be bought outright and the fee-simple estate in the land thus acquired by ordinary deed. Land purchase has generally been resorted to only in special cases. However, the choice of method and solution of the problem of obtaining gas storage rights in specific cases is not always so simple as the foregoing statement may appear to imply.

The choice of method is influenced by many factors and generally by what the state laws will permit, what agreement can be worked out with the landowner, and finally what the operator would like to do or considers economically justifiable. The laws of the state may prohibit or impose limitations on the ownership of land by corporations. Landowners may prefer one type of agreement to another. Some may be accustomed to and favor the periodic income plan generally in effect under oil and gas leases; others may prefer a single larger initial payment to cover all future use of their land.

Established custom in an area may influence such preference. Throughout the Eastern States and in Kansas, Oklahoma and Texas, land has generally been leased for underground gas storage purposes. In Michigan obtaining necessary rights by gas storage deed has become the

established practice. The operator himself may prefer to acquire gas storage rights by lease, making a minimum payment at the outset with continuing annual rental payments thereafter, thus capitalizing the cost at a minimum basis and subsequently charging such rental payments to expense. Or he may prefer to purchase the gas storage rights outright, and capitalize the entire cost. Among other factors, the provisions from time to time of Federal income tax laws, and rate base considerations, will have a bearing on the choice of method to be used.

The oil and gas development status of an area may have a considerable influence on the choice of method and the range of legal forms needed to accomplish desired control. Prospective gas storage areas may include undeveloped areas as in water sand projects, depleted gas or oil pools, or producing gas or oil pools, each presenting a somewhat different problem in acquiring control for gas storage purposes. Control of a previously undeveloped area with no outstanding mineral interests, if unleased for oil and gas, may normally be acquired from the landowner simply by combination oil and gas lease and gas storage agreement or by storage deed. If leased for oil and gas, the rights of the lessee must also be separately acquired by assignment of the lease in whole, or in part as applicable to a given stratum or strata in which gas is to be stored. The agreement with the landowner must be so written that such oil and gas rights will continue under control so long as the land is used for gas storage purposes.

In a depleted pool, a similar solution may be possible, but commonly existing royalty grants and outstanding mineral interests may complicate the problem. In a producing pool, all of these conditions may and probably will apply in some part or other of the area to be controlled. There will be the further complication of compensating for and acquiring the rights of all parties at interest in actual

production, if gas is to be stored in a producing zone, generally involving appraisal of reserves of gas or oil remaining therein. Also the release of all outstanding gas purchase contracts must be secured.

Where anyone other than the operator contemplating gas storage is going to use and has rights to use the surface or the subsurface of the land for any other purpose, an agreement of some sort between the storage operator and such other user is desirable to permit the lawful use of both without transgression on the rights of either.

In some instances it may be desirable or necessary to purchase land in fee by ordinary deed, including all rights. This procedure affords the most satisfactory control. Its limited use may be attributed in part to the generally greater cost and in some instances to legal or other restrictions on fee ownership.

Where land is relatively low in price and its purchase and ownership will be more economical than the payment of rentals under a lease, fee ownership is obviously desirable. Or where a landowner, for reasons of uninformed prejudice, may be wholly unwilling to grant any storage rights whatsoever, but still may be willing to sell his land in fee, purchase may be necessary. Subsequently, if desirable or necessary, such land may be resold, reserving all oil, gas and other minerals with appropriate right of removal, exclusive gas storage rights, and necessary use of the surface and subsurface of such land for production and gas storage purposes. Such reservation involves the use of a special provision written into an ordinary deed, and there appears to be no limit on the rights that may be so reserved.

Thus various methods and legal forms appropriate to each may have to be used in acquiring the desired control. In summary, such forms may include (1) combination oil and gas and gas storage leases, (2) oil and gas leases, or assign-

(Continued on page 45)

Industry news

Oregon utility wins annual report "Oscar"

FOR THE second consecutive year, Portland (Ore.) Gas & Coke Company has won the bronze "Oscar" presented by *Financial World* Magazine for the best annual report of the gas utility industry. A similar bronze "Oscar"

was awarded to Northern Natural Gas Co., Omaha, Neb., for the top 1952 report among pipeline companies.

Runner-up position in the gas utility category was captured by Consolidated Natural Gas Co., New York, N. Y., which won second-place in this category last year and first place the year before. Equitable Gas Co., Pittsburgh, Pa., received third-place honors.

Panhandle Eastern Pipe Line Co., New York, N. Y., which last year won a silver "Oscar" for the best annual report among all utilities, won recognition again, this time as runner-up in the pipeline classification. Third-place in this group was awarded to El Paso Natural Gas Co., El Paso, Texas.

The first annual report ever prepared by General Gas Corp., Baton Rouge, La., received the bronze Oscar in the liquefied gas category. Second and third places were taken by Suburban Propane Gas Corp., Whippany, N. J., and Metrogas, Inc., Chicago, Illinois.

Second-place in the public utilities holding company group went to Middle South Utilities, New York, N. Y., another prominent

member of A.G.A.

Among combination companies serving gas, first-place (bronze Oscar), second-place and third-place awards were made to:

Eastern Division—Niagara Mohawk Power Corp., Syracuse, N. Y. (bronze Oscar); Rochester Gas & Electric Corp., Rochester, N. Y. (second), and Central Hudson Gas & Electric Corp., Poughkeepsie, N. Y. (third).

Midwest Division—Dayton Power & Light Co., Dayton, Ohio (bronze Oscar).

Southern Division—Virginia Electric & Power Co., Richmond, Va. (bronze Oscar).

Western Division—Pacific Gas & Electric Co., San Francisco, Calif. (bronze Oscar).

More than 5,000 annual reports were rated by an independent board of judges in this thirteenth survey conducted by "Financial World". Weston Smith, originator and director of the annual report survey, presented the "Oscars of Industry" at the annual banquet in New York on October 26 before some 1,400 business and financial executives from the United States and Canada.

GAMA symposium evaluates water heater corrosion

WATER HEATER corrosion—troublemaker for manufacturers, distributors, dealers, servicemen and consumers—was subjected to a thorough examination during a symposium conducted at Case Institute of Technology, Cleveland. Gas Appliance Manufacturers Association sponsored the four-day meeting, attended by 57 manufacturers.

The symposium produced a wealth of information about the causes of corrosion, and resulted in suggestions for direct action which may enable manufacturers and water companies to combat corrosion more effectively.

One of the principal subjects discussed was

the classification of waters into five or six groups so that water heater manufacturers might predict the useful life of a tank using the various types of water.

The idea evolved after talks by Dr. Thurston E. Lawrence, Illinois State Water Survey, on water chemistry and the Langelier index.

Other featured speakers were: Thomas S. Howald, Chase Brass and Copper Co., who showed photographic slides containing data based on water chemistry, Professor Robert C. Weast, Case Institute, symposium director, who led discussions on electrochemistry of corrosion, cathodic protection, and the role

polarization in corrosion control; Professor Lawrence Seigal, also of Case Institute, who talked on fundamentals of heat transfer. Also contributing to the program were: Henry Shildener, Water Service Laboratories, New York; Dr. B. J. Sweo, The Ferro Corp.; Dr. William Stericker, Philadelphia Quartz Co.; Dr. George Hatch, Calgon, Inc., and Dr. Edward Bobalek, Case Institute.

The experts discussed the problems of corrosion, such as water temperature and the oxygen content of water, the use of vitreous enamel, sodium silicate and plastics, polyphosphates and magnesium anodes.

Two research works issued by A.G.A. laboratories

a PAR activity

TWO NEW RESEARCH

publications have been released by the American Gas Association Laboratories. Both cover studies sponsored by Association research committees under the PAR (Promotion, Advertising and Research) Program.

Laboratories Research Report No. 1204, "A Study of More Effective Use of Secondary Air to Support Atmospheric Gas Burner Flames," summarizes the findings to date and the exploratory methods used in the investigation. Data are developed which relate required secondary aeration for satisfactory combustion to

such factors as input rate, primary aeration, burner design and directing of secondary air into burner flames by means of baffle plates and secondary air passageways. The project was under the sponsorship of the Committee on Domestic Gas Research. Investigational work was conducted by James C. Griffiths of the Laboratories staff, author of the report.

"A Review of Literature on the Results Obtained by Mixing Varying Amounts of Oil with Industrial Gases before Combustion at Elevated Temperatures" presents an analysis and review of available literature of the factors affecting the heating of steel for forging in furnaces fired with gas-oil mixtures. Since

little information is available in the literature, the report deals with the combustion processes, heating rates and scale formation using single fuels in order to evaluate the general principles that might be applied to mixtures of fuels. This literature study was conducted under Project IA-6 for the Association's Committee on Industrial and Commercial Gas Research at the Battelle Memorial Institute, Columbus, Ohio. C. J. Slunder, C. J. Lyons, W. Gumz and A. M. Hall are authors of the report.

Copies of these reports are available at 75 cents each from American Gas Association Headquarters or the A. G. A. Laboratories.

California utilities build additional pipeline facilities

PLANS HAVE BEEN COMPLETED to construct 73 miles of 30-inch natural gas pipeline to parallel California's original "Biggest Inch."

The new addition to the "Biggest Inch," which is jointly owned by the Southern California and Southern Counties Gas Compa-

nies, is part of a \$210 million program approved in July by the Federal Power Commission. Cost of new facilities to move more gas to the fast-growing California market will total \$175 million for El Paso Natural Gas Co.; \$7.5 million for the two Southern California gas companies and \$26.7 million

for the Pacific Gas & Electric Company.

The new line will enable the importation of an additional 300 million cubic feet of natural gas into the area. Half of this amount will go to the two Southern California utilities and the other half to the Pacific Gas & Electric Company.

Gas incinerator forum pushes Denver clean-up drive

ROCKY MOUNTAIN GAS ASSOCIATION got off to a strong start last month in its proposed promotion of gas incinerators as part of the citywide clean-up campaign in Denver, Colorado. Participating in the association's special meeting on gas incineration were almost 200 city officials, dealers, heating contractors, architects, distributors, plumbers, manufacturer representatives and utility men.

Among those who approved the use of gas-fired incinerators to help solve the city's municipal trash and garbage collection problems was the chief of the fire prevention bureau of the Denver fire department, a Denver smoke abatement officer, the local representative of Underwriters Laboratories, Inc., and the Denver official in charge of garbage collection and disposal.

According to Roy G. Munroe, secretary-treasurer, Rocky Mountain Gas Association, communities supplied with natural gas in the Rocky Mountain area "should eventually find the gas-fired incinerator of tremendous importance from the standpoint of trash and garbage disposal. Several dealers already have crews of salesmen working door-to-door selling gas incinerators in Denver," Mr. Munroe declared.

William Van Genderen, vice-president of the association and chairman of the incineration meeting, noted the "great need during the past few years for flues whose use is approved by the Underwriters Laboratories, municipal authorities, and others for the safe venting of such appliances as gas-fired incinerators where flue gas temperatures would not exceed 1000 F continuously or 1400 F for brief periods of firing."

Three makes of flues and five makes of gas



William VanGenderen, vice-president, Rocky Mountain Gas Association, answering questions posed by group of 200 guests at the association's gas incinerator forum in Denver

incinerators were displayed on the platform. The chairman explained that the three flues had all been approved by the Underwriters Laboratories and two of them had been approved by the Denver authorities. The third flue has not yet been submitted for approval.

J. Robert Cameron, director of the sanitation division, City & County of Denver, disclosed that proposed legislation requiring gas-fired incinerators in new homes may be submitted to the city council.

Raymond L. Gordon, gas engineer and superintendent of the testing laboratory, Public Service Company of Colorado, emphasized

that stack temperatures result almost wholly from the combustion of trash and not from the amount of gas being burned. He added that the use of draft controls could easily keep stack temperatures below 1000 F and probably not above 700 F.

Chief Murray A. Wolz of the Denver Fire Prevention Bureau was a member of the panel that answered questions from the audience. He cautioned users of gas-fired incinerators not to let trash accumulate around the incinerator in the basement, but to burn it promptly. Chief Wolz also stressed the importance of using an approved flue and noted the safety factors of the incinerator itself.

Companies announce rate changes and new facilities

● **Tennessee Gas Transmission Co.**, Houston, has obtained a permit to construct, operate, maintain and connect facilities at the United States-Canadian border, for the export of natural gas. In granting a permit for these activities, the Federal Power Commission authorized Tennessee and Niagara Gas Transmission of Toronto, Canada to export the gas from the United States for ultimate consumption in the Toronto area.

● **Algonquin Gas Transmission Co.**, Boston, has submitted a natural gas tariff covering service to its utility customer companies

in New England. The tariff was submitted by Algonquin in compliance with a condition in the Federal Power Commission's opinion and order authorizing the company to complete its pipeline system and to commence natural gas service.

● **Lake Shore Pipe Line Co.**, Ashtabula, has reduced its wholesale natural gas rates \$17,618. The revised rate represents a 2.4 percent change. According to the Federal Power Commission, the lower rates reflect a reduction in the rates of Lake Shore's supplier,

Tennessee Gas Transmission Company.

● **Tennessee Natural Gas Lines Inc.**, Nashville, has increased its wholesale rates \$224,127 to become effective as of March 27, 1953, in lieu of a proposed \$353,764 increase, which it has been collecting since March 27, 1952.

The Federal Power Commission order allowing the \$224,127 increase directs the company to refund, with interest, the difference between the rates which it has been collecting under bond and the amount which has been allowed.

Natural gas men gather in Houston for INGAA annual meeting

GAS INDUSTRY public relations was in the spotlight at the annual meeting of the Independent Natural Gas Association of America, September 28-29. Keynoting that theme was James F. Oates, Jr., chairman and chief executive officer, The Peoples Gas Light & Coke Co., Chicago, who spoke before 400 producers, pipeline and distributors in Houston's Shamrock Hotel.

Other featured speakers were: L. F. McCollum, president, Continental Oil Co.; James F. Oates, Jr., chairman and chief executive offi-

cer, The Peoples Gas Light and Coke Co., Chicago; Lt. Gen. Ernest O. Thompson, chairman of the Texas Railroad Commission; C. Pratt Rather, president, INGAA; Edward T. McCormick, president of the American Stock Exchange.

Jerome K. Kuykendall, chairman of the Federal Power Commission, was the speaker at the annual dinner. A premiere showing of the first three-dimensional pipeline motion picture was another highlight of the dinner meeting.

The association re-elected its 1953 officers to serve during 1954. The slate includes: C. P. Rather, president, Southern Natural Gas Co., Birmingham, president; J. F. Merriam, president, Northern Natural Gas Co., Omaha, first vice-president; S. B. Ireland, president, Cities Service Oil Co., Bartlesville, second vice-president; J. J. Hedrick, president, Natural Gas Pipeline Company of America, Chicago, third vice-president; F. W. Peters, treasurer; John A. Ferguson, executive director; and W. E. Disney, general counsel.

Manufacturers announce products and promotional campaigns

● **Chambers Corp.**—Antique copper gas range which will not tarnish or discolor has been introduced in Savannah. The result of three years' experimentation and laboratory tests, the range can be cleaned without copper polish or scouring pads.

Chambers also reports that more than half its production of console models will soon be in colors rather than traditional white.

● **Norge Div., Borg Warner Corp.**—Jessie Cartwright, Norge's home service director, has suggested a 20-point check list to aid the distributor home economist, to help her

be a better salesperson, public relations and homemaking expert.

● **Acme Steel Co., Chicago** is manufacturing steel strapping which is ideal to brace gas meters in freight cars. The American Meter Company reports that the strapping reduces labor costs, minimizes intransit damage and makes handling easier and safer.

● **Republic Steel Kitchens** is installing a kitchen and laundry in the lobby of The East Ohio Gas Co., Canton. The kitchen will be equipped with every conceivable labor-saving

device. It will be staffed by the utility's home economist and will be open to women's clubs, church and school organizations.

● **Detroit-Michigan Stove Co.** has launched a "3-D" sales contest in key radio and television areas. The contest began on September 1 and will end November 30. It will be run among retail salesmen in each key area where the company's cooperative advertising is run. Top salesmen in each key area will win an all-expenses paid weekend during January at the Roney Plaza Hotel in Miami Beach.

A.G.A. completes new movie on safe practices

SAFE PRACTICES in gas production and transmission in the Appalachian fields are dramatically illustrated in a new 16 mm sound-color movie released by the Accident Prevention Committee of American Gas Association.

Entitled "Get Safety into Your System", the film is designed primarily for use at group meetings of company employees. It was produced with the cooperation of Empire Gas & Fuel Co., Ltd., Wellsville, N. Y., and Utilities Mutual Insurance Co., New York, N. Y.

Mechanical work on the project was executed by Edward C. Baumann, safety assistant, Public Service Electric and Gas Co., Newark.

Copies are available from A. G. A. Headquarters on a loan or purchase basis.

Buffalo utilities purchased by National Fuel Gas

THE NATIONAL FUEL Gas Company has purchased Republic Light, Heat & Power Company and Penn-York Natural Gas Corporation, both of Buffalo, N. Y., from Cities

Service Company.

Olin F. Flumerfelt, Iroquois president stated that the company hopes to bring 900 Btu gas to areas north of Buffalo by the end of 1954.

Mr. Flumerfelt and Stuart H. Nichols, Iroquois executive vice-president, have been named president and vice-president, respectively, of Republic and Penn-York.

Reunion marks 160 years in the gas industry

IN JUNE 1910, four young men just out of college, Clark Boardman, Harry Farrar, Dean Workman and Harvey Edmund, met in the Western United Gas and Electric general office at Aurora, Illinois. Mr. Boardman, a Wisconsin man, had spent the previous two summer vacations as a cadet engineer for Western United and had been commissioned to bring some of his classmates with him when he came this time. Mr. Clark was successful in selling Mr. Workman and Mr. Edmund on a career in the gas utility business and brought them along. Harry Farrar had come to a similar decision at Illinois. So the four started an association that has lasted over the years.

The first picture for the record was taken in 1912. As years passed, marriages, promotions, army service, new positions separated the group, but all have followed their first choice of career in the gas industry.

Recently, after over 40 years, there was a reunion in California of the four men and their wives. Clark Boardman is currently vice-president of Thermatomic Carbon Co., Monroe, Louisiana. Dean Workman is consulting gas engineer for Ebasco Services in New York. Harry Farrar, for 20 years president of Coast Counties Gas and Electric Co., now is vice-president of Pacific Public Service Company of San Francisco. Harvey Edmund is a retired vice-president and general manager of Coast Counties Gas and Electric Company.

Over the years the men have been active in gas association work. Mr. Edmund and Mr. Farrar are past-presidents of Pacific Coast Gas Association.

The photographer, trying to duplicate the pose of the original picture, commented that 40 years had had a "broadening" influence.



GAMA analyses home service contribution

HOME ECONOMICS staffs of the nation's gas companies have made more than ten million customer contacts in the past year and have answered more than 700,000 phone calls for cooking and home management.

A study by Gas Appliance Manufacturers Association shows that the number of home economists employed by gas utilities has increased 20 percent in each of the past two years. Today, more than 2,000 trained home-

makers are employed to make home calls and to conduct auditorium demonstrations on the care and use of modern gas appliances.

The increasing responsibilities of the home service staffs has been caused by a record expansion of natural gas service, greater use of gas appliances, including incinerators and dryers, and the expert counsel offered by the gas company home economists.

Utility drivers win award in Los Angeles

FOR THE SECOND consecutive year, the Southern California Gas Company has won honors for safe driving. The gas utility drivers earned second place in the Greater Los Angeles Area Fleet Safety Contest, sponsored by the National Safety Council.

K. D. Brown, assistant safety engineer at Southern California Gas Company, received the plaque on behalf of the utility drivers on September 25 at the Ninth Annual Fleet

Awards Dinner.

The award was based on a safety record for the year starting July 1, 1952 and ending June 30, 1953. In an extremely close race, the City of Glendale won first place honors with an accident frequency rate of 2.81, while the gas company was right behind with a rate of 2.84. Winning third place honors was the Department of Water and Power, with a rate of 3.06.

Wins safety prize



Coveted National Safety Council Association Award, presented to 11 of America's 700 trade associations, went to A. G. A. on October 20 during National Safety Congress

West Texas utility opens two headquarters buildings

THE WEST TEXAS Gas Company has opened two modern new headquarters buildings in Midland and Odessa.

Both structures feature drive-in pay windows, home service rooms, preparatory kitchen,

and spacious lobbies for the display of modern gas appliances. Although West Texas Gas does not merchandise, display space is used by local appliance dealers.

To commemorate the new headquarters, the

utility sponsored 12-page sections in the Midland and Odessa local papers. The sections were devoted entirely to pictures of the new buildings, the people who work in them, as well as news items and advertisements.

A. G. A. announces new publications during October

LISTED BELOW are publications released during October up to closing time of this issue of the MONTHLY. Information in parentheses indicates audiences for which each publication is aimed.

ACCIDENT PREVENTION

● **Proceedings of Fifth Safety Conference of A. G. A. in Buffalo, N. Y., September 17-18, 1953** (for operating and safety men). Available from American Gas Association Headquarters, New York, two dollars a copy.

ACCOUNTING

● **Proceedings of National Conference of Electric and Gas Utility Accountants, 1953** (for utility accountants). Available from A. G. A. Headquarters, New York. Price: \$6.00 a copy for members and \$7.50 for non-members.

HOME SERVICE

● **Gas Range Cookery Chart** (for home service, sales departments). Prepared by Home Service Committee. Prices: single copies, 10 cents each; 100, \$8.00; 200, \$13.50; 500, \$23.00; 1,000, \$35.00; additional M's (per M), \$30. Single copies available from American Gas Association Headquarters, New York; in quantity, from Williams and Marcus Co., 424 South 10th Street, Philadelphia.

LABORATORIES

● **What Does This Seal Mean to You?** (gas utilities, appliance manufacturers and dealers). Sponsored by and available from A. G. A. Laboratories, 1032 East 62nd St., Cleveland. Prices: 100 to 999, \$2.00 per hundred; 1000 to 9,999, \$1.50 per hundred; 10,000 and up, \$1.20 per hundred.

● **Research Report No. 1204, A Study of More Effective Use of Secondary Air to Support Atmospheric Gas Burner Flames** (for gas utilities and appliance manufacturers). Prepared by James C. Griffiths, under sponsorship of A. G. A. Committee on Domestic Gas Research. A PAR Activity. Seventy-five cents a copy. Available from A. G. A. Headquarters, New York, or A. G. A. Laboratories, Cleveland.

● **A Review of Literature on the Results Obtained by Mixing Varying Amounts of Oil with Industrial Gases before Combustion at Elevated Temperatures** (for gas utilities and appliance manufacturers). Prepared by C. J. Slunder, C. J. Lyons, W. Gumz and A. M. Hall, Battelle Memorial Institute. A PAR Activity, sponsored by A. G. A. Committee on Industrial and Commercial Gas Research. Seventy-five cents a copy. Available from A. G. A. Headquarters, New York, and A. G. A. Laboratories, Cleveland.

PAR PROGRAM

● **PAR Briefs, Second Four Months, 1953** (for executives of gas utilities and pipelines). Sponsored and prepared by the PAR Committee. Available from A. G. A. Headquarters, New York, free.

RESIDENTIAL GAS SECTION

● **Let's Get Down to Brass Tacks** (for gas company sales managers). Sponsored by the Gas Incineration Committee and available from A. G. A. Headquarters, New York, 25 cents a copy.

RESEARCH

● **Investigation of the Pressure Losses of Takeoffs for Extended Plenum Type Air Conditioning Duct Systems** (for gas companies, manufacturers, architects and equipment installers). University of Illinois Engineering Experiment Station Bulletin Series No. 415. Prepared by Seichi Konzo, Stanley F. Gilman, J. William Hall, Ross J. Martin. Available from A. G. A. Headquarters, New York, 50 cents a copy.

STATISTICAL

● **Monthly Bulletin of Utility Gas Sales, August, 1953** (for gas utilities, financial interests). Available from A. G. A. Bureau of Statistics, free.

Consolidated Natural subsidiaries promote in Pennsylvania

TWO PITTSBURGH GAS companies, New York State Natural Gas Corporation and The Peoples Natural Gas Co., have announced several important promotions and elections.

Richard J. Plank has been named general superintendent of Peoples Natural. He will be succeeded in his former position, superintendent of distribution, by Richard E. DuVall.

Two directors have been named. Edward C. Inghram has been elected a director of New York State Natural, and James B. Sayers has been appointed to the same post at Peoples.

Darwin Whipkey has been promoted to safety director for New York State Natural.

Mr. Plank will supervise all operating divisions, including production, transmission, distribution, engineering, geological, lease and field departments.

Mr. Plank has been with the company since 1936. A civil engineer, he is active in American Gas Association's Operating Section.

Mr. DuVall will be in charge of all distribution plants in western Pennsylvania. He has served the company for 16 years. A graduate of the University of Delaware, he is also a

member of A.G.A.'s Operating Section.

Mr. Inghram, general superintendent of New York State Natural was superintendent of production and storage before his promotion last January. He, too is a member of American Gas Association.

Mr. Sayers, secretary and chief counsel for the two companies, was elected secretary of Peoples in 1940 and of New York State Natural in 1943. He is a graduate of Pennsylvania State College and University of Pennsylvania.

Mr. Whipkey, a 12-year company veteran, has been in the safety department since 1952.

Personal
and
otherwise

Accountants advance in Panhandle Eastern organization

PANHANDLE EASTERN Pipe Line Co., Kansas City, has announced the promotions of two men active in American Gas Association's Accounting Section.

Leith V. Watkins, formerly secretary and controller, has been elected vice-president. He retains his post as secretary. In addition to his Panhandle responsibilities, Mr. Watkins is vice-president and secretary of Trunkline Gas Co., Houston, vice-president and secretary-treasurer of Hugoton Production Co., Garden City, Kansas. He is a director of all these companies and in addition is a

director of National Petro-Chemicals Corp. and of Michigan Gas Storage Company. Mr. Watkins was chairman of the A. G. A. Accounting Section during 1946-1947.

Donald A. Robertson has been elected controller of Panhandle Eastern. Mr. Robertson was formerly assistant controller and assistant secretary. With his new duties as controller, he retains the post of assistant secretary. Mr. Robertson served during 1952 and 1953 on the Accounting Section's General Accounting Committee and its Subcommittee on Budgeting and Forecasting.

Fink is succeeded by McElvenny as American Natural president

HENRY FINK has retired as president of American Natural Gas Company and Ralph T. McElvenny has been elected to succeed him.

Mr. Fink, who has been president and director of American Natural since 1948, will continue to serve in his present positions with the company's subsidiaries. He is president of Michigan Wisconsin Pipe Line Company, American Louisiana Pipe Line Company and American Natural Gas Service Company. In addition he is chairman of the board, Michigan Consolidated Gas Co., Detroit and a director of American Natural.

Mr. Fink has served as president of American Natural for almost two years beyond the time for his normal retirement. He has agreed to remain active in the management of the system, and in addition to his other duties, to supervise the construction of a new pipe line by American Louisiana Pipe Line Company.

Mr. Fink has been an executive with Michigan Consolidated Gas Company since 1919. He is well known in utility and engineering circles. A director of American Gas Association, he serves this year on the Association's Advisory Council and the Committee on Promotion, Advertising and Research (PAR). He is also a director of Independent Natural Gas Association.

Mr. McElvenny joined the American Natural Gas System in 1945 as financial vice-president and assistant to the chairman. He has served as executive vice-president of the company during the past two years. Before entering the utility field, he was affiliated with the Guaranty Trust Co., New York, United States Treasury Department and the Federal Securities and Exchange Commission.

In addition to his position with American Natural, Mr. McElvenny is a vice-president and director of Michigan Consolidated Gas



Henry Fink



R. T. McElvenny

Company, Michigan Wisconsin Pipe Line Company, American Louisiana Pipe Line Company and American Natural Gas Service Company. Also, he is a director of Milwaukee Gas Light Company, another American Natural subsidiary.

He is a member of A. G. A.

Ontario utility promotes

GEOERGE A. STAMMERS has been appointed general superintendent of the Dominion Natural Gas Co., Ltd., Buffalo.

As general superintendent, he will report to the president and will advise, recommend, coordinate, and carry out the policies, plans and directions of company officers.

Mr. Stammers is a graduate engineer of the University of Toronto. He has served in various capacities with the company since 1936. Just prior to his new appointment, he was division superintendent with headquarters in Brantford, Ontario.

Colorado Public Service promotes Denver executives

THE PUBLIC SERVICE Company of Colorado, Denver, has appointed several executives to higher posts. Guy W. Thomas has been named general commercial manager, Paul A. Yetter is now manager of division operations and Robert T. Person is manager of advertising and publicity.

Mr. Thomas joined the utility in 1919 as a junior engineer. He has served since as new business and power sales representative, power sales engineer, sales supervisor and manager of the Denver commercial department.

Mr. Yetter began working for the utility in 1923, and since then has been district super-

intendent, superintendent of electric and gas operations and division manager. Mr. Yetter is a member of American Gas Association.

Robert T. Person has been vice-president and general manager of a Public Service subsidiary, The Pueblo Gas and Fuel Company, since 1947. Before that, he was commercial manager of the subsidiary.

Mr. Person is being succeeded as vice-president and general manager of The Pueblo Gas and Fuel Co. by James P. Dresen, who has been superintendent of industrial gas sales in Denver. He has been with the company since 1930.

Daly named vice-president

HUGH C. DALY has been elected vice-president of Michigan Consolidated Gas Co., Detroit.

Mr. Daly joined the utility and its affiliated companies as an assistant secretary in 1950. He was named a vice-president of American Natural Gas Service Company in 1952. He will retain his post as assistant secretary.

Mr. Daly is a graduate of the University of Detroit. Before he joined the utility, he was a newspaperman for the *Detroit Times*.



Hugh C. Daly

Brown succeeds Culley as president of Southern Indiana

A. B. BROWN, executive vice-president and general manager of Southern Indiana Gas and Electric Co., Evansville, has been elected president. F. Bayard Culley, former president, retired on September 30. Mr. Culley and Mr. Brown will continue in their posts as directors of the company.

Mr. Brown has been associated with the Southern Indiana company since 1926. He was elected vice-president and operating manager in 1949 and became executive vice-president in 1952. His first duties with the company were as test engineer and he served in successive positions as chief engineer and general superintendent of gas, electric, heating and water operations.

Prior to joining Southern Indiana, he served the Ohio Edison Co., Springfield.

Mr. Brown is a graduate of Montana State

College. He is a member of American Gas Association, a director of Indiana Gas Association, president and director of Indiana Electric Association and a member of the Indiana Society of Professional Engineers.

Mr. Culley joined the company in 1934 as executive vice-president, and was made president in 1948. Before his association with Southern Indiana, he served the Georgia Power Company and its predecessors for 27 years. He, too, is a member of A. G. A.



A. B. Brown

Top echelon changes announced for United Natural Companies

J. G. MONTGOMERY, JR., has been elected to the newly created position of executive vice-president of The United Natural Gas and Associated Companies, Oil City, Pennsylvania. Mr. Montgomery has served as vice-president since 1939. He is a member of American Gas Association.

Other important personnel changes include Harry B. Wood and John A. Comet as vice-presidents and directors, Howard C. Rose as secretary-treasurer and director, and Lawrence Fleckenstein as assistant treasurer.

Mr. J. Talley, former secretary-treasurer, and J. F. Mullins, former assistant treasurer, retired on October 1.

Mr. Wood, a graduate of Colgate Univer-

sity, joined the company in 1924. He has served in the distribution, commercial and sales departments, as commercial manager, district commercial manager and chief commercial manager.

Mr. Comet, a Pennsylvania State College graduate, was first employed by the company in 1934 on construction projects. In 1952, he was named chief geologist.

Mr. Rose, who succeeds Mr. Talley as secretary-treasurer, is a Bucknell University graduate who has been employed since 1933 by United. He was appointed assistant treasurer in 1952.

Mr. Fleckenstein follows Mr. Mullins as

assistant treasurer. He has served the company for 36 years, spending all of his time in the accounting and treasury departments. Since January 1952, he has been supervisor of construction and plant records.

Mr. Talley had served the company for 36 years and Mr. Mullins for 51 years before their retirement. Mr. Talley, a graduate of Valparaiso University, Indiana, joined United's general accounting department in 1917. He was elected assistant secretary and assistant treasurer in 1923, and to the board of directors in 1945. He has served as secretary-treasurer since 1950. Mr. Mullins was first employed by the company as a messenger when he was 14 years old.

Manufacturers announce personnel changes and promotions

● **American Meter Co.**, Philadelphia—Robert McAlister, and John T. Heffernan have been appointed to the sales staff. John T. Young is sales representative for the western division, Canadian Meter Co., Ltd., American Meter subsidiary in Alberta.

● **Coleman Co., Inc.**, Wichita—Alwin B. Newton has been named chief design engineer and Ray W. Qualley director of research.

● **Dresser Industries, Inc.**, Dallas—J. Curran Freeman has been elected controller.

● **National Radiator Co.**, Johnstown, Pa.—Joseph E. Lindsay, formerly research engineer, has been advanced to assistant manager of engineering service department.

● **Norge Div., Borg Warner Corp.**, Chicago—Stewart Battles is now vice-president in charge of manufacturing and engineering.

● **Servel, Inc.**, Evansville, Ind.—New sales managers are announced for the following districts: J. R. Lumpkin, Miami; Frank D. O'Sullivan, Philadelphia; Early Cunningham, Albany; and C. Sidney Johns-

ton, Jr., Milwaukee.

G. Howard Christine has been promoted to manager of the contract sales division. Byron Getman is now supervisor of purchasing follow-up and Louis R. Smith is a buyer in the purchasing division.

● **Williams Div., Eureka Williams Corp.**, Bloomington, Ill.—Milton V. Stagg, assistant to the vice-president, retired on September 1. Victor E. Reed has been appointed field sales representative in the Boston Metropolitan area.

New England utility names Rennell general superintendent

THOMAS H. RENNELL, JR., has been appointed general superintendent of the Berkshire Gas Co., North Adams, Massachusetts.

Mr. Rennell joined the utility in 1941 as

works clerk. After service in the Army Air Corps, he entered the New England Electric System's student training program.

Since 1949, when he was named assistant

superintendent in Northampton, he has served in Boston on the natural gas conversion program, in Malden as engineering assistant, and in Salem as executive assistant for gas.

California crew leader completes Part II of A. G. A. course

ANOTHER GAS INDUSTRY employee has completed a part of the American Gas Practice course conducted by Professor Jerome J. Morgan under the auspices of A. G. A.

The course is divided into Part I, production of manufactured gas; and Part II, distribution and utilization of city gas.

Harvey W. Thornton, an employee of Coast

Counties Gas Co., has completed Part II. Mr. Thornton has worked for Coast Counties for about ten years, and now serves as a crew leader or head fitter.

Hargrove and Pyburn named to Texas Eastern legal positions

RCLYDE HARGROVE has been appointed assistant general counsel for Texas Eastern Transmission Corp., Shreveport, and Keith M. Pyburn has been named attorney in charge of the company's office in Washington, D. C.

Mr. Hargrove is a partner in the Shreveport law firm of Hargrove, Guyton, Van Hook and Hargrove. For several years, he has been handling the corporation's legal matters, including certificate and rate cases.

Mr. Hargrove was graduated with the de-

gree of bachelor of arts in economics and business administration from Rice Institute in 1939, and the degree of bachelor of laws from Yale University in 1942. During World War II, he served in the United States Army as a captain.

Mr. Hargrove is a member of the Louisiana State Bar Association, the American Bar Association and the Federal Power Bar Association. He will continue as a partner in the law firm of Hargrove, Guyton, Van Hook and Hargrove.

Mr. Pyburn was graduated with the degree of bachelor of arts from Louisiana Polytechnic Institute in 1931 and with the degree of bachelor of law from Tulane University in 1936. He was a partner in the law firm of Pyburn, Smith and Giddens prior to his employment by Texas Eastern. During World War II, he served in the United States Army as a major.

Mr. Pyburn is a member of the Louisiana Bar Association and also of American Bar Association.

Alma mater and engineering profession honor Pettyjohn

CAPTAIN E. S. PETTYJOHN, vice-president and director of the Institute of Gas Technology, Chicago, has been awarded a "distinguished alumnus" award from the University of Michigan's college of engineering. Captain Pettyjohn, director of the gas institute since 1945, received a citation for his contributions to the development of the field of engineering during the college's centen-

nial celebration.

Captain Pettyjohn received his B.A., B.S.E. and M.S.E. from the University of Michigan, and in 1930 was granted his professional degree of chemical engineer.

In addition to several years of industrial and research experience, he was an associate professor of chemical engineering at Michigan before joining the armed forces in 1940. In

the U.S. Navy, he served as head of the oil section, United States Strategic Bombing Survey and as liaison officer in the United States Naval Technical Mission.

Captain Pettyjohn is very active in American Gas Association. This year, he serves on the Gas Production Research Committee and on the Operating Section's Managing and Manufactured Gas Production Committees.

Two join Columbia system

KARL SHAVER, formerly with the Securities and Exchange Commission, has joined the treasury department of Columbia Gas System Inc., New York.

Mr. Shaver is an engineer and a lawyer with degrees from Kansas State College and George Washington University.

Jane N. Magruder, a public speaker, has joined the information department of The Ohio Fuel Gas Co., Columbus. She will speak on various phases of the gas industry before club, civic and professional groups.

She is a graduate of Furman University, and holds a master's degree in speech from the University of Wisconsin.

Hess corporate secretary of Lone Star Gas

CHARLES G. HESS JR. has been named corporate secretary of Lone Star Gas Co., Dallas. He succeeds T. J. Uhl, who retired on September 30 after 34 years with the company. Miss Mary Emison will be assistant secretary.

Mr. Hess joined the utility in 1924 as a

stenographer. He earned a law degree, in 1932, studying at night at the Dallas School of Law. He served as chief clerk before his appointment as assistant secretary in 1941.

Miss Emison started working for Lone Star in 1926, also as a stenographer. She is a graduate of Daniel Baker College.

Baker named personnel director at Colorado Interstate

JOHAN T. BAKER has been named director of personnel for Colorado Interstate Gas Co., Colorado Springs.

Before joining the utility, Mr. Baker was a special agent for the Federal Bureau of In-

vestigation for seven years. A graduate of Baylor University, Waco, Texas, Mr. Baker served as an intelligence officer with the United States Navy during World War II.

Stoker advances in Omaha

JAMES H. STOKER has been promoted to assistant manager of land and leasing for Northern Natural Gas Producing Co., Omaha. He will assist Everett Roubesh.

He will supervise the handling of all lease records for the company. In his new position, he will spend considerable time visiting areas where the company is engaged in leasing of land. Northern Natural Gas Producing Co., a subsidiary of Northern Natural Gas Co., directs an over-all exploration program in search of a new gas supply.

Mr. Stoker has been continuously employed by Northern Natural since 1938. Before his recent appointment, he was superintendent of the document section. He is a member of American Gas Association.



James H. Stoker

Allen retires as Canadian Journal editor

GEORGE W. ALLEN is retiring as editor of the *Canadian Gas Journal*. Mr. Allen, who has served as the *Journal's* editor for 34 years, is internationally known in the gas industry. He is succeeded by Iris Naish, who has served as news editor for the last few months.

Mr. Allen has served the utility business since the turn of the century, when he started an electric and gas contracting business in Toronto. Later, he moved to Brantford, Ont., where he was influential in spreading the use of natural gas.

In 1909, he joined the Consumers' Gas Company of Toronto as a salesman, and shortly after was named advertising manager.

He was elected secretary-treasurer of the Canadian Gas Association in 1916, and was appointed editor and advertising manager of the *Canadian Gas Journal* in 1919. In 1951, Mr. Allen retired as secretary-treasurer of the Canadian Gas Association, to be succeeded by Warner A. Higgins, Toronto public relations consultant.



G. W. Allen

Appoint Wooters General Gas sales manager

NORMAN E. WOOTERS, former president of Gas Refrigeration Co., Inc., has been named manager of sales, General Gas Corp., Baton Rouge.

Mr. Wooters, who joined General Gas last spring as a field sales advisor, will aid I. W. Patterson, vice-president and general sales

manager.

Mr. Wooters was president of Gas Refrigeration Co., Inc. from 1946 to 1952. Before that, he served Servel Inc. as assistant vice-president and Westinghouse Electric Supply Co. as refrigeration sales manager.

He is a member of A. G. A.

Saponaro named vice-president of Algonquin Gas in Boston

FRANK P. SAPONARO has been elected vice-president of Algonquin Gas Transmission Co., Boston. He will be in charge of handling rate, sales and regulatory activities of the company.

Mr. Saponaro has a broad background in

the utility and regulatory fields. After his graduation from Harvard in 1931, he worked for Consolidated Edison Co. of New York. He then served as chief of the rate section, Rural Electrification Administration and subsequently as chief of the rate filing and con-

tract analysis section, Federal Power Commission.

For the past several years, Mr. Saponaro has actively participated in the work of the Rate Committees of the American Gas Association and the Independent Natural Gas Association.

McVey and Scaff directors of Controllers Institute

RONALD L. MCVEY, vice-president of Tennessee Gas Transmission Co., Houston, and **H. H. Scaff**, vice-president, Ebasco Services, Inc., New York, have been elected directors of Controllers Institute. The elections were announced at the institute's twenty-second

annual meeting in New York, September 28.

Mr. Scaff is active in the American Gas Association's Accounting Section, and Mr. McVey served last year on the section's Managing Committee.

Elect Foster director

GLEN E. FOSTER, vice-president of The Brooklyn Union Gas Co., has been elected a director of the company and made a member of the executive committee.

Mr. Foster is a member of American Gas Association.

Massey serves on top American Standards Association group

HAROLD MASSEY, assistant managing director of the Gas Appliance Manufacturers Association, has been re-elected to American Standards Association's board of review. This is Mr. Massey's third consecutive

term as a member of the six-man panel which is regarded as the "supreme court" of the association.

Mr. Massey is also serving a third term as a member of the association's standards council,

a post in which he has been active since February 1947. Early this year he was elected a member of the miscellaneous standard board, and has been an alternate in the conference of executives of organization since 1949.

Wathen advances

HUGH L. WATHEN has been promoted to the newly-created post of director of sales and public relations, South Jersey Gas Co., Atlantic City. In his new capacity, he will be in charge of all sales promotional and public relations activities.

Mr. Wathen, who has served as general sales manager since 1951, began his service with the company in 1927.

Active in American Gas Association's Residential Gas Section, he serves this year as chairman of the New York-New Jersey Regional Gas Sales Council. He is also a member of New Jersey Gas Association.



Hugh L. Wathen

Reid and Ashby represent gas industry on A21

TWO new members will represent A. G. A. on the American Standards Association Committee on Approval and Installation Requirements for Gas Burning Appliances. They are: **J. C. Reid**, vice-president, Southern Union Gas Co., Dallas, and **Dr. Carl T. Ashby**, assistant chief engineer, Servel, Inc., Evans-

ville, Indiana.

The committee, known as A21, establishes basic requirements for the installation, performance, safe operation, substantial and durable construction of gas appliances and piping systems.

Wehman joins Ohio Gas Company

JUDSON J. WEHMAN has been appointed sales manager, Ohio Gas Co., Bryan. He succeeds **Bernard C. Paul**, who has joined the Michigan Gas Utilities Co., Coldwater, as sales manager.

Mr. Wehman is a graduate of Ohio Wesleyan University. Before joining Ohio Gas, he was a member of the sales and advertising staffs of The Ohio Fuel Gas Co., Cleveland.

Commerce Department committee names Smith

CHARLES PENNYPACKER SMITH, chief gas dispatcher for Pacific Gas and Electric Co., San Francisco, is serving on the Department of Commerce Advisory Committee on Weather Services. Mr. Smith is the only mem-

ber of the gas industry on the eight-man group.

One phase of the committee's inquiry will be to determine the extent to which the Weather Bureau should endeavor to meet specialized industrial needs.



Lucien W. Mueller

chairman of the board of directors, Mueller Co., Decatur, Ill., died on October 7 at the age of 58.

Mr. Mueller had been associated with the firm throughout his entire business career. He was elected to the board of directors in 1922, following graduation from Cornell University and army service during World War I. He began in the engineering department, be-

came vice-president in charge of factories in 1928, and vice-president in charge of administrative and sales engineering in 1944. He was named board chairman in 1947.

Mr. Mueller is survived by his wife, **Clari-bel Rorick Mueller**, two sisters, and three brothers.

Martin Shepherd

of the National Bureau of Standards, Washington, died suddenly of a heart attack on September 17.

Mr. Shepherd had served on American Gas Association and American Society for Testing Materials Committees for many years. At the time of his death, he was a member of the ASTM Committee D-3 on Gaseous Fuels and its Advisory Committee. As one of its sub-committee chairmen, he was responsible for

the preparation of several different standards on analysis of gaseous fuels.

Alfred H. White

professor emeritus and founder of University of Michigan's department of chemical engineering, died on August 25. Professor White had served the university for 46 years, during which time he was the author of many research papers and technical journals on the manufacture and testing of illuminating gas.

Professor White was a member of American Gas Association, American Chemical Society, American Society for Testing Materials, and a past-president of American Institute of Chemical Engineers. He was also a member of the local advisory board of Michigan Consolidated Gas Company.

Beware of the "gypsy" appliance repairman racket!

● "Last September we reported a warning from the American Gas Association concerning so-called equipment experts who talk their way into jobs of rebuilding and insulating commercial cooking equipment, charge high prices, and silently steal away, leaving the food service operator to cope with the

added danger of fires caused by unskilled repairs. Now the Pennsylvania Restaurant Association reports similar 'gypsy' repairmen working in the vicinity of Harrisburg and expected to move into other parts of Pennsylvania. Usually their work must be replaced by a legitimate gas equipment repairman, and the ex-

pense to the operator is at least doubled. Since this type of racket knows no state boundaries, it would be wise for anyone approached by persons claiming to be repairmen to get in touch immediately with the local gas company and check on the repairmen's credentials."—*Institutions Magazine*

Hot oil fogger

(Continued from page 20)

and diminishing amounts as the distance from the fogger increased was easily discernable. After the cold fogger was replaced the oil sendout of the hot fogger was adjusted to be exactly the same as the cold fogger had been and gas samples were taken again at the same locations. It was then noticed that the quantity of oil was uniform at each of the locations, a mile away or at the service about 15 feet downstream from the fogger.

Another remarkable and distinguishing fact was the quantity of drip collected in the main. The cold fogger required pumping about ten gallons of

drip oil from the drip pot near the outlet of the regulator alone every month. No drip has been found downstream from the regulator or fogger during the year the hot fogger has been operating at the rate of the replaced cold fogger.

Other field test data that have been very encouraging include:

(1) The fogger has been operated continuously for one year with absolutely no service other than refilling the supply tank.

(2) There has been no sign of carbonization of the oil even on the heater units.

(3) There has been no sign of sludging of the oil from over 400 gallons of

oil fogged to date.

Performance of the fogger to date has been so favorable that we are constructing six additional foggers for installation this year. Two of the installations will replace cold-oil foggers in areas where the dust and oil control problem has been most difficult to keep in balance. The other four installations will be made at new regulator installations. Within another year we will have available more information in regards to performance and versatility of this new oil fogger.

It may be well to mention that by proper construction of the fogger it can be used for fogging into high pressure systems.

Service and salesmen

(Continued from page 22)

portance of proper engineering of mains and services to hold costs to a minimum—an economic necessity. Again, teamwork can assist in reducing the rising costs of these installations. The sales department must obtain the most complete data available on the proposed development and turn it over promptly to the operating department. This may mean a year in advance of the proposed construction, but this advance information is essential. With complete knowledge, the operating department can then do an ex-

cellent job of sizing and layout. Both departments must take a broad view of future possibilities as well as immediate requirements. It may be advisable to complete an entire area before house construction is started. The cost should be less if work is done on ten streets in an area at one time rather than in ten separate jobs. Resurfacing costs are thus eliminated; there is less interference with diggers, etc; there is greater assurance of getting the business, and our public relations are vastly improved.

In recent years the practice is increasing to require developers to install water and sewers before any lots are sold or

construction started. We also may be forced to install our mains at the same time. *BUSINESS JUDGMENT*, with all capital letters, is necessary in deciding what to do. Moreover, teamwork between operating and sales departments is essential and very comforting.

Good service from the salesmen's point of view is the same good service that the customer expects and that operating departments of gas companies are constantly striving to provide. The necessity for this good service is self-evident. The first requisite for attainment is teamwork among sales, operating, and all other departments of each gas company.

Customers, sales rise

(Continued from page 23)

Pacific area to a high of 26 percent in the West South Central area. The average for the entire United States is five percent.

Service disconnections for non-payment, nation-wide, increased at the same rate as new customers. However, the Middle Atlantic and East North Central areas reported decreases, whereas substantial increases occurred in the South

Atlantic, Mountain and Pacific areas. The increases in total dollar charge-offs were also the greatest in the last named three areas and in the East South Central and West North Central areas.

The upward trend in charge-offs, which has been continuous for the past five years, is evident again for the first six months of 1953. However, the percentage of increase for the country as a whole, 14.6 percent, is considerably below the increase of 21.5 percent reported for the last six months of 1952. It is

also encouraging that the New England area actually shows a decrease and the West South Central area reports a negligible increase when compared with the growth in total sales. About one-third of the companies reported a lower charge-off than last year while several companies reported substantial increases. There are many good reasons for spotty local conditions, but until the over-all spiral of charge-offs is decisively checked, the industry's credit men must keep constantly on the alert.

Industrial relations

(Continued from page 24)

All disputed employees, the Board found, receive and have received since 1949 a pay differential above the wage scale paid to employees with the same seniority who report to them because, "in the language of the contractual provision for such differential, they are 'designated to supervise the work of other employees.'"

The decision brings out that before the 1952 dispute these employees were included in the CWA unit, covered by the contract. Since 1949 the employees in question have had the responsibility of "rating their subordinates" each six months on a progressive wage increase form which lists 12 factors. The form, according to the Board's findings, is filled out on employees who have passed the last contractual progressive wage increase, and although the contract does require job vacancy posting, and transfers and promotions are made on the basis of seniority, the agreement requires the applicant also to have the "necessary qualifications."

"Accordingly," the Board says, "we find that the authority to rate employees according to the . . . form is authority effectively to recommend or effect changes in the status of the employees rated." NLRB concludes that: "We therefore find that the disputed employees are properly excluded from the unit. We shall, accordingly, amend our certification with respect to these classifications of individuals."

CWA's certification is amended to "exclude from the certified unit, as supervisors, the supervising operators and all daily wage earners who receive a supervisory differential, employed by the employer." (Case No. 21-RM-189. Made public August 1, 1953.)

● **Arbitration decisions—Stabilization echoes**—Employers who sign union contracts for pay increases while pay controls were in effect are busy examining their contracts in the light of a recent arbitration award. This award turned thumbs down on a union's demand that an employer put into effect a pay increase that he had agreed to but which the WSB had later disapproved (Best Manufacturing Award, 5 ALAA).

The company had agreed to give a general increase of eight cents an hour but the contract made the increase subject to the following condition: "If part of said increase is approved, then only that part which is approved shall become effective." The WSB approved an increase of only five cents an hour which the company subsequently put into effect. When wage controls expired on February 6, 1953, the union demanded that the company put into effect the three cent increase that the WSB had disapproved. The company refused.

The union's position was that the lifting of pay controls removed the bar to the three cent increase and the company was bound by its agreement to give an eight cent increase (only five cents of which had been paid).

The arbitrator agreed with the company that its only contractual obligation was to pay so much of the negotiated increase as the WSB would approve. Payment of the five cent increase satisfied this obligation.

The arbitrator pointed out that the parties

to the contract could have provided against the contingency of the pay controls expiring during the life of the contract. But they did not do so. The precaution taken by many companies and unions was to include in their contracts a provision permitting the unions to reopen the question of wages when, as, and if pay controls ended while the contracts were still in effect.

● **Contract decisions—Bargaining with a repudiated union**—An employer should look before he leaps to the conclusion that he need not bargain with a certified union which has been repudiated by a majority of his employees. Even a sincere desire to follow the democratic principle of majority rule may not be a good defense to unfair labor practice charges.

Recently, two different Courts of Appeals examined this question and reached opposite conclusions. One court upheld the NLRB's refusal-to-bargain order (NLRB v. Ray Brooks, 53 ALC 761), while the other set aside the Board's directive (Mid-Continent Petroleum Corp. v. NLRB, 53 ALC 648).

This problem arises only in cases where the union is repudiated soon after being certified. If more than a year has passed, the disgruntled employees can usually obtain a decertification election.

In the Ray Brooks case, decided by the 9th CA, the court agreed with the Board that industrial stability was important enough to override the wishes of the employees. It held that the union should be allowed a reasonable time, usually a year, after certification to deal with the employer, even though the employees have indicated they want nothing more to do with the union. This employer had received a letter signed by most of his workers, repudiating the labor organization, one week after the election and one day before certification.

The Sixth Circuit Court of Appeals, in the Mid-Continent case, ruled that the employees could leave the union at any time and that the employer was not obligated to recognize an abandoned bargaining agent. Six weeks after certification, half the employees sent the employer individual letters stating that they no longer wanted union representation. The court pointed out that the employer had negotiated with the union in good faith until he received the letters of repudiation, and that he had done nothing to persuade the employees to leave the union.

The court said merely that an employer need not bargain with a repudiated union if he does not want to. It left open the question whether an employer who bargains voluntarily with a repudiated union commits an unfair labor practice.

Lawful refusals to bargain—In 1951 the 6th CA, prior to its Mid-Continent Petroleum decision, exonerated another employer from an NLRB refusal-to-bargain order. The union was repudiated within a week after it won a Board election. Because the employees disavowed the union without the employer's influence, he had no duty to continue recognizing it. To rule otherwise, the court felt, would interfere with the Act's policy of permitting employees to choose their own representatives (NLRB v. Vulcan Forging Co., 51 ALC 362). The following are other examples of permissible refusals to bargain:

Refusing to continue dealing with a certi-

fied union after 43 out of 49 employees in the bargaining unit signed a decertification petition (NLRB v. Bradley Washfountain Co., 51 ALC 1252).

Breaking off negotiations with a union three weeks before expiration of the certification year, after the company was notified that the employees had filed a decertification petition (NLRB v. Globe Automatic Sprinkler Co., 52 ALC 982).

An employer can justify his refusal to deal with a certified union only if his own conduct did not contribute to the employees' loss of faith in the union. If he is responsible for the repudiation, he has committed an unfair labor practice by refusing to bargain.

After a union has been certified for more than one year, an employer can refuse to bargain with it if he has a good faith doubt as to its majority status (Celanese Corporation).

● **Court reverses NLRB rule on "inside" union**—The Ninth Court of Appeals, with side remarks of some interest, refuses to enforce a Labor Board order directing Wayside Press, Inc., to stop coercing employees and to cease recognizing an "inside" union.

The first finding of the Board was based on questions asked on job application forms—whether the applicant belongs to a union, and if so, which one. Since there was no background of employer hostility to unions and information gained from the form was not used to restrain or coerce employees, the court says, "the finding of the Board is unwarranted and should be set aside."

The Board found domination of the inside group because working foremen were in favor of it and helped "reactivation" of the organization in several ways; because ballots were printed and distributed on company time and property, and because the "reactivation" meeting was held on company time and property (with nobody docked for the 30-minute session). After considering these several details separately, the court concludes that the cumulative evidence doesn't add up to employer domination. The court says, among other bits of advice, "It was not the purpose of the Wagner Act and it is not that of the Taft-Hartley Act to encourage hostility between employer and employee. . . . Here the facts disclose exactly the relationship between the employer and employee which businessmen and workers should seek, the workers organized for protection of their rights and still on a friendly contact with their employer."

Speaking at plants

● **Speak to a gas man about a gas plant and he'll think of manufactured gas work turning out carburetted water gas or some other type of manufactured gas.**

Speak to a botanist about a gas plant and he'd most likely say, "dittany."

Dittany actually is a plant that produces gas. According to biologists it abounds on Mount Diete in Crete, hence the name dittany. It is any of various herbs. One is a mint native to Crete, having drooping spikes of pink flowers. But the type most interesting to a gas man is the dittany found in southern Europe. It generates a gas which ignites when a flame is applied.

Columbia solves riddle

(Continued from page 6)

should be granted. The non-technical trainee may be discouraged quickly because the work is beyond his capabilities, or he may become a more valuable employee by acquiring greater technical skills. In either case he learns that the company is not discriminating against him.

Despite the time and effort spent on interviews and the careful planning behind the whole training program, some engineers still leave the company. But Columbia feels that its planning is paying off. The rate of turnover is gratifyingly low. Of those who do leave, a few go for personal reasons, such as wanting to live nearer to their families, and others feel that they started off in the wrong business. Improved interviewing techniques and better understanding of the company's activities might show that these latter should not have been hired in the first place.

The largest single reason for turnover among junior engineers is the armed forces. Columbia's policy is to employ engineering graduates who are eligible for induction and hope that during the few months of training before they are inducted they will learn to like the company and their work well enough to return when their military stint is over.

The training programs in Columbia's operating groups are administered by the employee relations departments. It has been found that it works better this way, for the engineering department has been known to succumb to the temptation of leaving a junior engineer on a job which he was doing well longer than the schedule calls for. As a re-

sult he is apt to miss another important phase of his all-round indoctrination. Employee relations, with a more objective viewpoint, sees that the men move along according to schedule.

In the groups, the schedules are much tighter and less flexible than in the Gas Engineering Department, for control must be more rigid. J. M. Wilson, director of employee relations in the Charleston Group, reports that their training program recently has been cut from 40 to 36 weeks. This cut was the result of a "round-table true confessions" session held after the "graduation" of their first engineer training class last year. Squeezing out 20 days has effected a considerable saving in cost. As Mr. Wilson puts it, "I believe the trainees are actually happier, since the last month apparently dragged. They wanted to get on with the regular departmental assignment."

With each new class, both the groups and the Gas Engineering Department improve training methods. Better selection and more actual productive work—these are among Columbia's aims for its engineer training program.

The real challenge to the gas industry in the face of a short supply of engineers is how to attract and hold increasing numbers of engineering graduates. The training program is aimed at the ultimate goal of putting the right man in the right job with the right people around him so that he will be happy and productive.

Columbia, like all utilities, wants an adequate reservoir from which to draw well qualified and experienced personnel to fill the growing number of positions opening up as the company expands.

Facts & figures

(Continued from page 17)

Manufacturers Association and are reprinted by GAMA in their releases.

Preliminary data on gas range shipments show a slight gain during September (as compared to the corresponding month of 1952), but the increase fell far short of the monthly average gain for the year. For the first nine months of 1953, range shipments of 1.66 million are equivalent to an increase of 5.7 percent. This gain has been achieved in spite of a decline so far this year of 0.9 percent in new non-farm housing starts, which aggregate 861 thousand for the first nine months. The ratio of gas to electric range sales during August was 2.0 to 1, the best record achieved so far this year. The annual average for the first eight months was only 1.46 to 1.

Gas water heater shipments continue to increase at a more rapid rate than electric units, although the margin is small. For the first nine months of 1953, sales of 1.65 million gas units were equivalent to an increase of 19.6 percent

over the comparable period one year earlier. All available indicators point to a decreasing number of new housing starts in the next few years; this factor undoubtedly will affect electric water heater sales more adversely than gas. Since a larger proportion of the total existing market will represent replacements, consumer satisfaction with previous gas water heaters, and corresponding replacements with new gas units, should serve to lessen the impact upon total shipments of such equipment.

New housing starts during September continued the decline initiated several

months ago under the impact of high construction costs and interest rates combined with slightly decreased demands. Construction costs at the beginning of August exceeded the 1947-49 base period average by more than one-third.

Increases in gas sales during August amounted to only 2.9 percent, as average temperatures throughout the country were virtually identical with those experienced in the same month of 1952. Total sales during the year ending August 31 were 55,694 million therms, an advance of 10.5 percent.

GAS SALES TO ULTIMATE CONSUMERS BY UTILITIES AND PIPELINES DURING AUGUST

(MILLIONS OF THERMS)

AUGUST	1953	1952	Percent Change
All types of gas	3,487	3,389	+ 2.9
Natural gas	3,315	3,223	+ 2.9
Other gases	172	166	+ 3.5
TWELVE MONTHS ENDING AUGUST			
All types of gas	55,694	50,381	+10.5
Natural gas	52,440	47,009	+11.6
Other gases	3,254	3,372	- 3.5

Gas storage rights

(Continued from page 33)

ments thereof, and supplemental gas storage leases, (3) gas storage deeds, (4) mineral (oil and gas) deeds, (5) royalty conveyances and assignments, (6) ordinary deeds, (7) easements, and (8) special forms or special provisions written into ordinary forms.

Still another form that might be used is a long term general all-purpose lease covering all rights and interests in the land. This broadest form of lease might be written in a very short instrument. Where made with the owner of land in fee-simple, it would permit the lessee to use the land as he pleased for any and all purposes, except where in the process anything of value in the land at the time of making such lease might permanently be taken therefrom by the lessee. This limitation, while apparently permitting the underground storage of gas, would of course preclude production of native gas or oil unless specifically provided.

Where voluntary agreements with owners of the various interests and rights required cannot be obtained by the normal procedure of bargaining, desired control involving sufficient right of use may be secured only by condemnation.

In such states as permit condemnation of land for underground gas storage purposes, settlement must be made for all of the rights of others included in or extinguished by the condemnation applicable to a given piece of land. In such case, neither lease nor deed is involved, but a court order, and the rights granted depend on the particular state law. The court order, while not a lease or a deed, has the effect of a deed. It is in effect a conveyance by the state, a permanent grant of a certain interest in land, and generally in the oil and gas in the reservoir rock condemned, limited to and to be used for a specific purpose, and conditional on continued use for such purpose. When the land ceases to be so used, the interest acquired by condemnation reverts to the former owner or successors. Such interest is originally acquired for an amount of money fixed by the court, and paid in a single lump sum, with no continuing payments or rentals.

Condemnation for gas storage purposes is relatively new, and court decisions, with reference to it are not numerous. Constitutionality may be

Statement Required by the Act of August 24, 1912, as Amended by the Acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233) Showing the Ownership, Management and Circulation of

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1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, American Gas Association, Inc., 420 Lexington Ave., New York 17, N. Y.; Editor, Jac A. Cushman, 420 Lexington Ave., New York 17, N. Y.; Managing editor, None; Business manager, None.

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JAC A. CUSHMAN, Editor.

Sworn to and subscribed before me this 23rd day of September, 1953.

LAWRENCE P. BROWN
NOTARY PUBLIC, STATE OF NEW YORK
Residing in Queens County
State No. 41-0453000
Qualified in Queens County & N. Y. County
Commission Expires March 30, 1955

involved. However, necessity for such procedure is becoming generally recognized and accepted as being appropriate and in the public interest.

At present the States of Illinois, Kansas, Kentucky, Michigan, Oklahoma and West Virginia have statutes granting to utilities the right of eminent domain with specific reference to underground gas storage. Doubtless other states will follow in enacting similar legislation.

On the other hand, in some states not having such statutes, it is possible that general statutes of eminent domain are broad enough to cover underground gas storage. It appears though that in a still greater number of instances such general statutes are too limited in scope to do so.²

Exceptional situations may arise where, for one reason or another, obtaining rights to store gas underground is impractical. An example, is the case of an active and perhaps important oil pool containing a partially depleted gas sand suitable for storage with usable wells completed in such sand, where the producers are unwilling to dispose of any portion of the control of such pool by assignment of rights. Even if they were willing, the complications of dual operation in the particular instance might make such acquisition and use hazardous and undesirable. Still, due to the lack of other known potential gas storage pools within the area and strategic location of the particular pool from a gas storage viewpoint, need for its use might be somewhat urgent.

In such case, it would appear preferable not to undertake to acquire control by means of the necessary gas storage rights, but to work out an operating agreement whereby gas would be delivered to and stored by the producers for the account of the company desiring to accomplish storage, the producers redelivering such gas when and as required.

Such a special case does not properly come within the scope of this article. I mentioned it as an alternative arrangement, which does accomplish underground gas storage, is now in effect in some pools in at least one state, and might in some exceptional situations be applicable elsewhere.

Acknowledgments

While the author accepts sole responsibility for the statements made herein, grateful acknowledgment is expressed to the chairman and other members of the American Gas Association Committee on Underground Storage, to present and former members of its Subcommittee on Storage Lease Forms, and to executives and attorneys of many of the companies represented by members of the subcommittee, for helpful discussion in committee meetings, subsequent review of this paper prior to its presentation here, and the constructive suggestions made. Acknowledgment is also made to Fenton H. Finn, who as the first chairman of the Committee on Underground Storage, proposed the preparation of the paper. Particular appreciation is expressed, for constructive criticism, assistance and general cooperation, to my fellow officers, Harrison F. Johnson, president, and Donald W. Stewart, vice-president and general counsel, Union Gas System, Inc.

2. Burns H. Erbe: Condemnation of Depleted Reservoirs for Gas Storage, World Oil, October 1950, 66-68.

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Sound selling

(Continued from page 30)

results day in and day out. They want to know before they purchase that they will have a dependable source of our product. And they need, from time to time, to be assured that the source is dependable. They want prompt equipment service and familiar personal contact as problems arise. Familiarity with your company's policies and operations, with results being obtained throughout the gas industry and facts regarding the source and nature of the product you sell, will engender confidence.

Your objective is to sell gas in such a manner that will make its continued use secure and enhance its value in the estimation of your customers. If you discover that any policy of your company or any action or lack of action of a division of your company prevents attainment of that objective, I implore you to pass the word on to those above for prompt attention. When your customer knows he can look to you for "follow-through," you have sound customer relations.

Sound selling is common sense selling. It will create sound customer relations. While we are more interested in where we are going than where we have been, a good record does generate optimism. It is an indication that you have followed sound selling procedures and have developed sound customer relations. I congratulate you on your fine record and urge you to continue your good work.



1953

NOVEMBER

- 9-13 •American Petroleum Institute, Conrad Hilton Hotel and Palmer House, Chicago, Ill.
- 9-13 •National Hotel Exposition, Kingsbridge Armory, New York, N. Y. (A. G. A. will exhibit.)
- 10-13 •School Food Service Association Annual Convention, Boston, Mass. (A. G. A. will exhibit)
- 11-13 •Wisconsin Utilities Association, Hotel Schroeder, Milwaukee, Wis.
- 17-20 •A. G. A. Operating Section, Organization Meetings, Hotel New Yorker, New York, N. Y.
- 18-20 •National Metal Trades Association, Cleveland, Ohio
- 18-20 •Mid-Southeastern Gas Association, annual meeting, Sir Walter Hotel, Raleigh, N. C.
- 23-24 •Public Utilities Advertising Association, Region 8, Amarillo, Texas
- 29-Dec. 4 •The American Society of Mechanical Engineers, Statler Hotel, New York, N. Y.

DECEMBER

- 10-11 •Public Utilities Advertising Association, Region 2, Skytop Manor

1954

JANUARY

- 17-21 •National Association of Home Builders Convention and Exposition, Chicago, Ill. (A. G. A. will exhibit)
- 18-20 •A. G. A. Home Service Workshop, Deshler Hilton, Columbus, Ohio

FEBRUARY

- 25-26 •Public Utilities Advertising Association, Region 1, Mount Royal Hotel, Montreal, Canada

MARCH

- 1-5 •American Society for Testing Materials, Shoreham Hotel, Washington, D. C.
- 4-5 •A. G. A. Transmission and Storage Conference, New Orleans, La.
- 15-17 •Mid-West Gas Association, Fort Des Moines Hotel, Des Moines
- 25-26 •New England Gas Association, Hotel Statler, Boston, Mass.
- 25-26 •Oklahoma Utilities Association, Biltmore Hotel, Oklahoma City

APRIL

- 12-14 •A. G. A. Sales Conference on Industrial and Commercial Gas, Edgewater Beach Hotel, Chicago
- 12-14 •National Conference of Electric and Gas Utility Accountants, Hotel Statler, Boston, Mass.
- 13-15 •Oklahoma Utilities Association, Southwestern Gas Measurement Short Course, University of Oklahoma, Norman, Okla.
- 20-23 •A. G. A. Distribution Motor Vehicles and Corrosion Conference, Mount Royal Hotel, Montreal

Personnel service

SERVICES OFFERED

M.A. in Economics—Experience in research and analysis of corporation laws and taxation; editorial and writing ability. Desire change to any position of responsibility and future. Young, veteran World War II and Korea. 1743.

Safety Engineer—College trained with five years' engineering and personnel experience (including industrial relations) desires permanent position in Middle West. 1747.

Operating Executive—Diversified experience in sales and operations of manufactured, natural and LP gases, desires to work in industry or represent manufacturer. Presently in business as co-owner but will be available about September 15th. 1748.

Manager—Experience with both natural and bottled gas operations. Considerable experience in building new business and construction. 1749.

Manager—Small or medium size natural gas utility. Presently employed in a responsible position in engineering and operations department of natural gas utility having approximately 250,000 meters. Thoroughly experienced in distribution engineering, field operations, pressure regulation, industrial gas engineering, and office management. (35). 1750.

Gas Engineer-Salesman—With 22 years' experience in residential and industrial sales, construction, modernizing gas plant, market surveys, public relations. Wants new territory to develop. 1751.

Administrative Assistant to Executive—Adaptable, dependable, Phi Beta Kappa, Officer World War II. Can write, lecture, handle people. Taught college English to engineers, 6 years major university. Editorial, public relations, personnel, trainee for sales, etc. Now near New York City, will relocate. Married (33). 1752.

Manufacturer's Representative—Many years of selling appliance and devices to the gas utilities, with a proven sales record. Broad and valuable personal contacts. Used to responsibility and sales organization. 1753.

Superintendent—30 years' experience in gas transmission, distribution, design, development and construction. Licensed Professional Engineer (Michigan). Interested as consultant in new natural gas properties. 1754.

Gas Engineer—Experienced in manufactured and natural gas business for combination utility. Design, construction, operation and maintenance of plants, transmission and distribution systems. B.S. degree; Registered Professional Engineer. Interested in engineering—management—operations. 1755.

Controller - Treasurer - Budget Director—Heavy public utility experience. Skilled administrator, keen analyst, gets things done in minimum cost. Thorough knowledge modern accounting techniques, IBM, finance, auditing, costs, controls, budgets, systems and procedures, credits, insurance, taxes, pensions, government contacts. Timely and accurate figures interpreted for management action. Effective controls painlessly applied. Harvard trained—business administration, accounting, finance, statistics, law. Member Controllers Institute. Can relocate, U. S. or abroad; knowledge languages. Available immediately. 1756.

Public Relations Executive—Comprehensive national, community, employee, general public, socio-economic-political-business experience—liaison all groups and callings. Experienced in organization, policy, program, training, advertising, sales and promotion planning, coordination and development. Unique experience in human relations. Mature sound judgment developed in 20 year period of diversified experience. Available any location. 1757.

Advertising Manager—25 years in the gas industry, most of time with appliance and house heating equipment manufacturers, selling through utilities and retail dealers. First hand experience with all phases of merchandising, advertising and sales promotion of consumer durable goods. College graduate. Desires work with manufacturer who can use this gas industry background either at factory or in the field. Prefers to headquarter in New York area, but is willing to travel nationally. 1758.

Administrative Assistant—Dependable, officer World War II. Three years background in industrial sales, administration and market research. Can lecture, handle people and write. College graduate with MS in Business. Will relocate. Single (32). 1759.

Assistant Controller-Executive Accountant—C.P.A., desires change to challenging new job requiring thoroughly competent accounting executive with proved supervisory ability. Ten years solid background; heavy in budgeting and forecasting, stock control, systems and procedures, financial planning and management reports. Present company volume \$90,000,000. Married (32). 1760.

Sales Manager and/or Sales Promotion Manager—Former area sales manager for large manufacturer offers broad experience in merchandising domestic gas appliances. Promotion of sales through utilities in many states provides extensive knowledge utility merchandising and promotion. Have also established many successful distributor operations. Coordinating distributor-dealer-utility programs. Also experienced sales promotion-advertising. 1761.

Experienced Product Engineer—well versed in the design, development and production of gas fired appliances, is seeking a new connection. Employment has been entirely in the appliance field including ranges, heaters, central heating and cooling in administrative and supervisory capacity. Available on short notice. Please write for resume. 1762.

Sales Manager—Twenty-seven years' sales experience and the past seventeen years representing a nationally known manufacturer of gas appliances. Familiar with dealer, distributor and manufacturer operations. Aggressive, ambitious, energetic and versatile. Will travel. Five figure salary. 1763.

POSITIONS OPEN

Manager Manufactured Gas Utility. Administrative and sales directing abilities absolute requirements; technical background desirable. Permanent position and substantial opportunity for qualified person. Replies confidential. Submit resume of education, experience and salary requirements. 0698.

Gas Appliance Engineer—to develop new products per A.G.A. requirements and product design specs for mass production of water heaters and space heaters. Located within 150 miles of Cleveland. Your reply held in confidence. 0699.

Gas Engineer—Growing natural gas company located in north central area has opening for gas engineer experienced in preparation of material for presentation before regulatory bodies and in natural gas transmission or distribution operations. Salary commensurate with ability and experience. Replies confidential. 0700.

Graduate Engineer—Growing natural gas company located in north central area has opening for recent graduate for engineering work in connection with natural gas transmission and distribution operations. Some experience in

field desirable but not essential. Salary commensurate with ability and experience. Replies confidential. 0701.

Engineer—Manufacturer of gas boilers requires competent engineer with managerial skill for development production and field service. Position offers responsibility, permanency and salary commensurate with ability and experience. Present location in New York metropolitan area. 0702.

Sales Engineers—Industrial gas experience—to sell industrial furnaces and ovens in Chicago, Southern Ohio, Pittsburgh and Rochester territories. Old established furnace manufacturer expanding sales force. 0703.

Engineer—Leading manufacturer of residential heating and cooling equipment in the Washington, D. C.-Baltimore, Maryland area desires the services of an engineer experienced in the application or design of such equipment. Furnish education, work, history, and starting salary with application. 0704.

Appliance Promotional Director—in 35-50 year age bracket. Qualified to assume complete direction of manufacturer appliance promotional programs in coordination with existing and continuing industry programs. At least ten years promotional experience with manufacturer(s) of domestic gas appliances required. Ability to speak, write, plan, organize, direct and work with others most necessary. Eastern Headquarters, considerable traveling. Salary commensurate with ability and experience. Submit detailed resume which will be treated with strictest confidence. 0705.

Home Economist—must have degree from accredited college. Experience in sales activities preferred but not required. Must be neat, personable, enjoy meeting and working with people. A fair for public speaking and demonstration work essential. Position is permanent in a growing organization and provides excellent opportunity for advancement. Gulf coast area. Submit resume of education, experience, and ambitions. 0706.

Assistant to Superintendent of Manufacture—35 to 40, for company in Sao Paulo, Brazil. Experienced in gas manufacture, works maintenance and administration, with horizontal reports, C.W. Gas and ancillary plant. Salary commensurate with qualifications and experience. 3 year agreement, subject to renewal, with 4 months paid leave after 3 years. Superannuation scheme. 0707.

Promotion Manager—Must be familiar with utility, manufacturer and dealer operations. Requirements include ability to originate ideas, plan promotions, write in convincing fashion, and follow through with production of display booklets and other necessary materials. Good personality and ability to work in harmony with others of prime importance. Salary commensurate with ability. Send detailed resume, which will be kept confidential. 0708.

Assistant Controller—Immediate opening with a large natural gas company for man with considerable experience in accounting in a regulated industry. Supervisory and administrative experience desirable. To be considered for this position, located in a large midwest city, applicant must furnish full details of qualifications, a brief personal digest, age and salary expectation. 0709.

Gas Appliance Engineer—To design and develop gas-fired appliances in home heating field. Must be thoroughly familiar with A. G. A. requirements and field service problems. Should also understand production procedures. Must have initiative and be able to supervise complete development laboratory. Permanent position for responsible man and good salary offered by a highly rated old line manufacturer located in the Southeastern part of United States. 0710.

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